

# Dental Digest

Sixty-Seventh Year of Publication  
Volume 67 Number 12

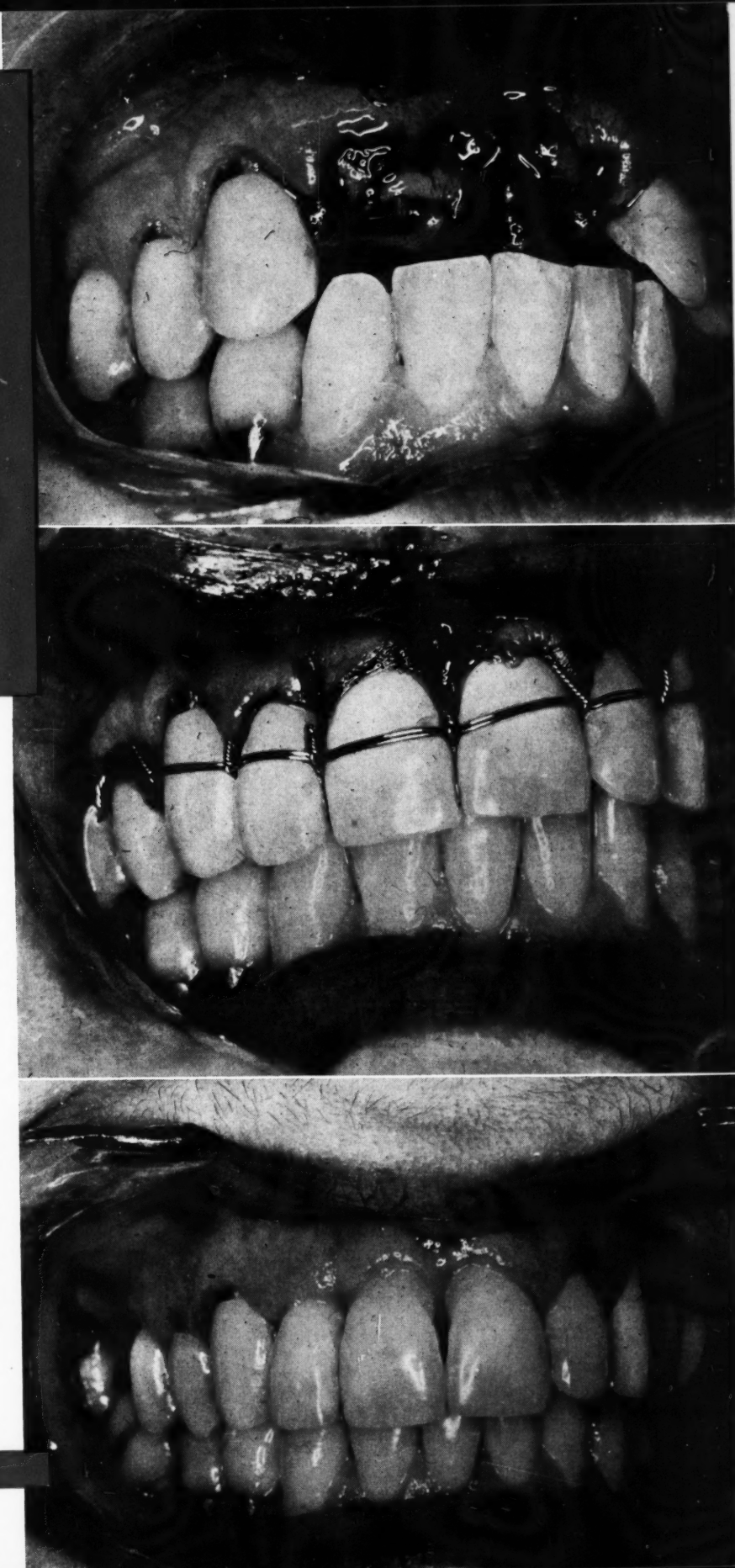
**December 1961**

## IN THIS ISSUE

Replantation of Evulsed Teeth: A Case Report .....	568
A New Physiologic Method for Repositioning the Mandible —Part Three .....	570
Filling Root Canals in Deciduous Teeth By An Injection Technique .....	574
Facial Herpes Zoster .....	576
The Clinical Evaluation of Hydroxyzine: A New Psychotherapeutic Agent for Anxiety in Oral Surgery .....	580
A Simplified Denture Processing Technique .....	582
The Editor's Page .....	587
Clinical and Laboratory Suggestions .....	588
Medicine and the Biologic Sciences .....	590
Annual Index .....	594
Contra-Angles .....	600

(A Complete Table of Contents  
Appears on page 567)

Cover Illustration—  
Friedman article, page 568

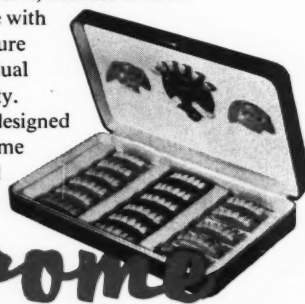




*...in porcelain  
and plastic*

Blendability is inherent and an exclusive feature of Polychrome. All Polychrome colors blend with each other, with UNIVAC porcelain colors, with Verident plastic colors and with vital teeth. Thus the range of selection of both colors and markings at your command is virtually unlimited. While standard sets of Polychrome Anteriors can be used to achieve the highest levels of esthetic excellence, when the case requires it, because of their exclusive "blendability," you can use Polychrome with UNIVAC or Verident colors in a single denture without restriction—to reproduce any individual dentition naturally and with absolute fidelity.

**POLYCHROME COLOR SELECTORS** are especially designed to demonstrate the living esthetics of a Polychrome denture to your patients. Ask your Universal Dealer for a demonstration.



# Polychrome

THE ANTERIOR TEETH WITH THE NEW COLOR DIMENSION

UNIVERSAL DENTAL COMPANY • 48th at Brown Street • Philadelphia 39, Pa.



# Dental Digest

**December 1961**

Registered in U.S. Patent Office

## About Our

## CONTRIBUTORS

JAY W. FRIEDMAN, D.D.S. (School of Dental and Oral Surgery, Columbia University, 1948) is a general practitioner and is well represented in dental literature. Doctor Friedman is at present preparing for the degree of M.P.H. at the University of Michigan. His article in this month's DIGEST is REPLANTATION OF EVULSED TEETH: A CASE REPORT.

ABRAHAM G. KRAMER, D.D.S. (College of Dentistry, New York University, 1924) and his co-author, SOPHIE KELNER, D.D.S. (The Dental School, Northwestern University, 1926) are engaged in research in mandibular repositioning, a subject to which Doctor Kramer has devoted 23 years. In this issue they present the third and final installment of their three-part article, A NEW PHYSIOLOGIC METHOD FOR REPOSITIONING THE MANDIBLE.

MARTIN GREENBERG, D.D.S. (College of Dentistry, New York University, 1944) is engaged in the practice of general dentistry. He publishes in DIGEST for the first time this month. His article is FILLING ROOT CANALS IN DECIDUOUS TEETH BY AN INJECTION TECHNIQUE.

ROBERT A. ATTERBURY, B.S., D.D.S. (College of Dentistry, University of Illinois, 1942) is Clinical Assistant Professor of Oral and Maxillofacial Surgery, University of Illinois, Research and Educational Hospitals and College of Dentistry, Chicago. His co-author, SUNDER J. VAZIRANI, B.D.S., D.O.S., M.S. (University of Illinois, 1959) is Professor of Oral Surgery, Government Medical College (Dental Wing) and Chief of Oral Surgery Section, Rajindra Hospital, Patiala, Punjab, India. Doctor Atterbury and Doctor Vazirani have collaborated on a number of articles for presentation in DIGEST. This month their article is FACIAL HERPES ZOSTER.

WILLIAM B. LINENBERG, D.D.S. (School of Dentistry, Temple University, 1955), M.S.D. Oral Surgery (Graduate School of Medicine, University of Pennsylvania, 1961) specializes in oral surgery. He has taught oral surgery at Emory University School of Dentistry and has completed his residency at Grady Memorial Hospital. His first DIGEST article, THE CLINICAL EVALUATION OF HYDROXYZINE: A NEW PSYCHOTHERAPEUTIC AGENT

Replantation of Evulsed Teeth: A Case Report  
*Jay W. Friedman, D.D.S.* ..... 568

A New Physiologic Method for Repositioning the Mandible—Part Three  
*A. G. Kramer, D.D.S., and Sophie Kelner, D.D.S.* ..... 570

Filling Root Canals in Deciduous Teeth By An Injection Technique  
*Martin Greenberg, D.D.S.* ..... 574

Facial Herpes Zoster  
*Robert A. Atterbury, B.S., D.D.S., and Sunder J. Vazirani, D.D.S., M.S.* ..... 576

"Burning Lips" Associated with Esophageal Reflux (An Abstract)  
*Maurice Garretts, M.B. (Lond.), M.R.C.P.* ..... 579

The Clinical Evaluation of Hydroxyzine: A New Psychotherapeutic Agent for Anxiety in Oral Surgery  
*William B. Linenberg, D.D.S., M.S.D.* ..... 580

A Simplified Denture Processing Technique  
*Raphael Escoe, B.S., D.D.S.* ..... 582

The Editor's Page ..... 587

Clinical and Laboratory Suggestions ..... 588  
1. Separation for Silicate Restorations. 2. Combination of Antibiotic Powder and Temporary Cement. 3. Simplified Bite Registration Technique. 4. Reduction of Noise in Air Turbine. 5. Relief Area for Full Upper Dentures. 6. Insufflator Tube Used for Suction.

Medicine and the Biologic Sciences ..... 590

Annual Index ..... 594

Contra-Angles ..... 600

The Etiology and Therapy of Acute Pyogenic Parotitis (An Abstract)  
*John S. Spratt, Jr., M.D.* ..... 606

**EDWARD J. RYAN, B.S., D.D.S., Editor**

**WANDA T. PICKARD, B.A., Assistant Editor**

708 Church Street, Evanston, Illinois

FOR ANXIETY IN ORAL SURGERY, appears in the current issue.

RAPHAEL ESCOE, B.S. (City College of New York, 1948), D.D.S. (College of Dentistry,

New York University, 1953) has been a contributor to DIGEST since 1956. His last article, on the T-band matrix, appeared in March. This month he presents A SIMPLIFIED DENTURE PROCESSING TECHNIQUE.

Copyright 1961 by Dental Digest, Inc. See page 562 for subscription data, etc.  
The magazine is mailed on the fifteenth of the month of issue.

# Replantation of Evulsed Teeth:

## A CASE REPORT

JAY W. FRIEDMAN, D.D.S., Seattle

### DIGEST

The patient in this case was thrown forward into the dash panel in an automobile collision. The right maxillary lateral and both central incisors were evulsed. During dental examination in the hospital the possibility was suggested that the missing teeth might not have been fractured. Her husband, who was driving and was uninjured, returned to the scene of the accident. One tooth was recovered from the gutter and the other two teeth were found on the floor of the car. This article reports the procedure employed for successful replantation of the three teeth.

### Preliminary Measures

The patient, a woman of 42, was involved in an early morning automobile accident during which she lost three teeth. The teeth were recovered at the site of the accident several hours later. The roots of the teeth were covered with grime.



1. Front view of bruised, swollen lips and nose.



2. Lacerated mucosa before debridement.

**Preparation of Teeth** — 1. They were placed in zephiran chloride 1:1000 for one-half hour.

2. The roots were curetted, all debris and remnants of periodontal membrane were removed.

3. The root canals were cleaned, enlarged, and filled with gutta-percha and chloropercha.

4. The apexes were rounded off with discs. The canals were left under-filled less than  $\frac{1}{2}$  millimeter.

5. Old silicate restorations were replaced (Fig. 3).

**General Condition of Patient**—The patient presented at the clinic eight hours after the accident (Fig. 1). Examination disclosed the following conditions: (1) The upper lip was split, (2) the labial alveolar plate was splintered, and (3) the mucosa was torn through the midline to the base of the maxilla (Fig. 2).

### Replantation Procedure

1. The area was thoroughly debrided.

2. Under local anesthetic the patient



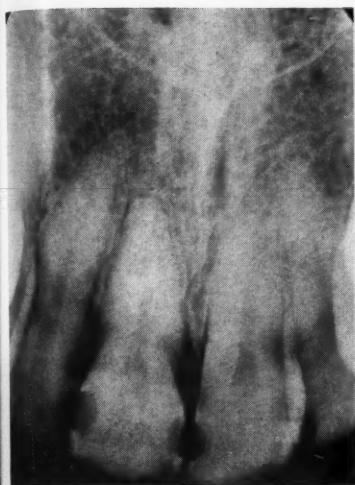
3. Teeth cleaned and filled before replantation procedure.



4. Teeth replanted and ligatured, tissues sutured.



5. Three and a half months after replantation.



6. X-ray view one and a half years before the accident.



7. Pre-replantation view.



8. Post-replantation view.



9. X-ray two years later. No mobility present, suggesting ankylosis of replanted teeth.

from the dashboard which was embedded in the bone (except that which appeared to be residual staining into the surface of the remaining intact maxillary bone) was removed.

3. The teeth slipped into the sockets easily and were retained by lingual and interproximal bone, with only slight labial bone at the apex.

4. The teeth were firmly ligated with stainless steel wire from the left lateral and cuspid through the right cuspid and bicuspid (Fig. 4).

5. The tissue was sutured interproximally to close the entire wound. The result was that there was uninterrupted gingival tissue covering the labial surfaces of the roots. The pa-

tient who was sensitive to penicillin was maintained on chloromycetin succinate for 72 hours, 250 milligrams daily and was hospitalized for observation of shock.

### Postoperative Progress

Two weeks later a soft acrylic mouthguard was constructed to relieve stresses of night bruxism. The patient complained of some pain at the base of the nose but the teeth remained relatively symptomless. She returned weekly for examination of wire ligature which was kept tight at all times, completely immobilizing the anterior teeth.

**Ligature Removed** — Three and a half months later one of the labial wires broke and the entire ligature was removed (Fig. 5). The maxillary right lateral and both central incisors had no mobility, indicating that the hoped-for ankylosis was present.

**Gingiva Reattached** — The maxillary left lateral incisor, which had remained intact in the accident, was slightly mobile although still vital. The gingiva had reattached and there were no periodontal pockets.

**Observable Defects** — The only observable sequelae to the accident were the 2-millimeter recession of the labial gingiva and the loss of the central interdental papilla which causes the patient to complain of "sucking air."

### Comment

Loss of the front teeth was more shocking to the patient than any other phase of the accident. Their immediate replacement was of profound psychological importance. Even if the procedure failed to be permanent, it would have served as a satisfactory temporary restoration. The initial results being successful there is a good possibility that she will retain these teeth in excellent condition for many years. Two years after the replantation they are firmly attached and functioning satisfactorily.

118 Broadway East

## A NEW PHYSIOLOGIC METHOD

### for Repositioning the Mandible—Part Three

A. G. KRAMER, D.D.S.\*, and SOPHIE KELNER, D.D.S.\*\*\*, New York

#### DIGEST

*In this installment, which is the last of a series of three, the author presents the step-by-step technique for the construction of a posterior aluminum-acrylic bridge and for an upper anterior aluminum-acrylic bridge. These bridges are worn by the patient for about two months in order to establish definitely the new correct reflex pattern. After this, construction is completed, segment by segment, of the final and permanent restoration.*

#### Construction of Posterior Aluminum-Acrylic Bridges

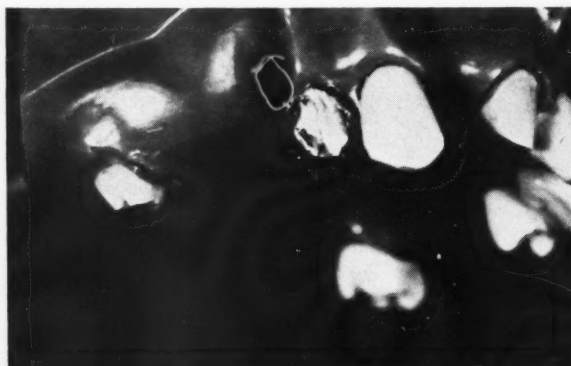
The following steps are taken to complete this procedure:

1. An aluminum shell is accurately fitted to the prepared tooth using foot pluggers and pliers to obtain adaptation to the tooth (Fig. 18).
2. The aluminum shell is removed, rinsed off in hot water, and dried thoroughly.
3. Kerr's luting wax is inserted in the hollow of the crown. Excess luting wax, as in the case of the anteriors, is allowed to protrude about two

inches so that it can be held easily in the left hand of the operator (Fig. 19). Mark the protruding luting wax with a cross indicating the buccal aspect of the crown.

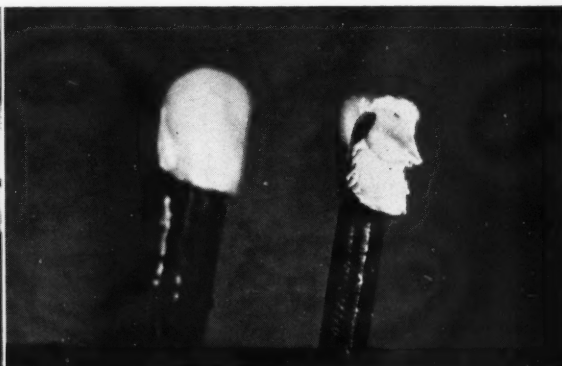
4. A freshly prepared mix of self-curing acrylic is applied in a thin mix with a camel's hair brush to the circumference and occlusal surface leaving the gingival  $\frac{1}{16}$  of an inch free of acrylic for the present.

5. The acrylic is hardened with hot air and hot water and the crown is replaced on the tooth (Fig. 20). If the upper posteriors are in good relation-

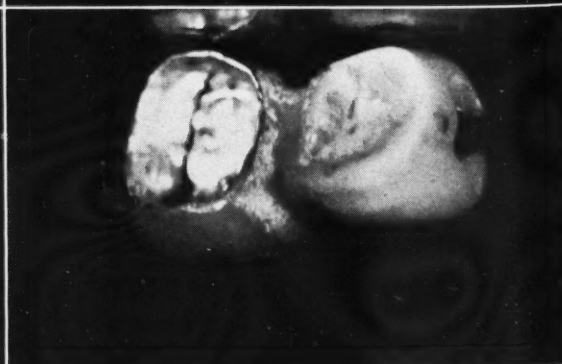


**18 (top left).**  
*Adapted aluminum thimble.*

**20 (bottom left).**  
*Replacement of finished crown on tooth.*



**19 (top right).**  
*Kerr's luting wax in hollow of crown. Lingual view showing stages of "paint-on" completion.*

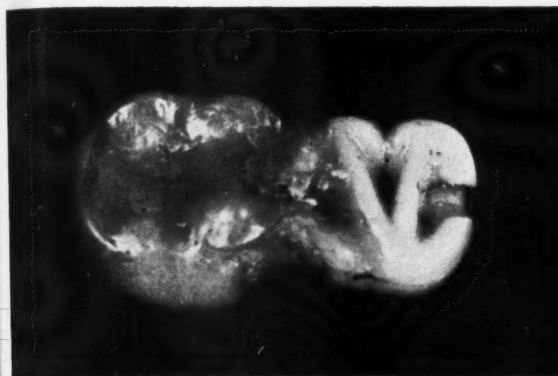


**21 (bottom right).**  
*Missing posterior attached to abutment crown. Undercut in readiness for attachment to adjoining replacement.*

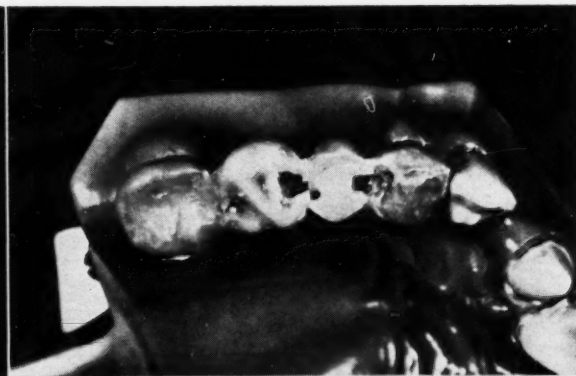
\*Associate Visiting Dentist (Rehabilitation) Thoracic Division, Queens Hospital Center.

\*\*Assistant Visiting Dentist, Thoracic Division, Queens Hospital Center.

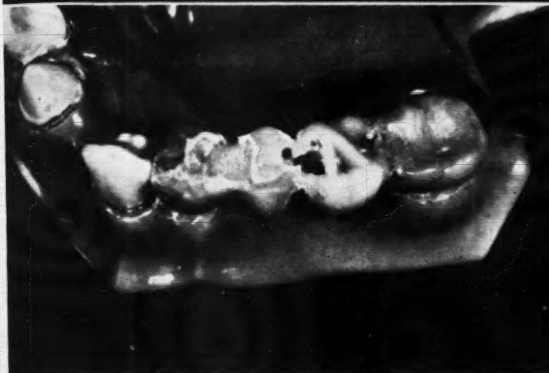




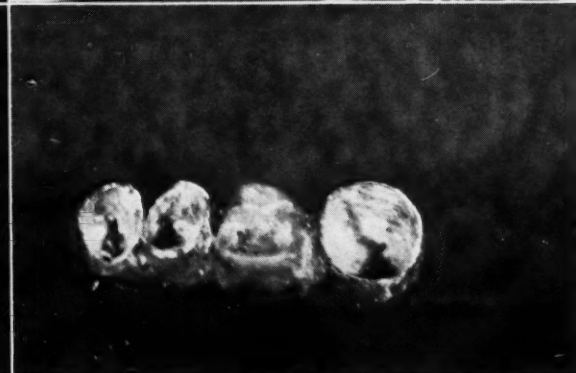
**21A (top left).**  
*Undercut shown from occlusal.*



**21B (top right).**  
*Occlusal view showing undercuts.*



**21C (bottom left).**  
*Undercut to right filled in. Left undercut still unattached.*



**21D (bottom right).**  
*Linguogingival view of bridge.*

ship, or in the case of an upper bridge the lowers are in good relationship, a new quantity of acrylic is mixed to a doughy consistency and applied to the occlusal surface of the crown with a thinner mix.

6. The plane of the occlusal surface is determined by closure against the upper teeth or lower teeth, depending for which jaw the bridge is being constructed.

7. Hot air is applied, the crown is removed, and held under hot water.

8. The gingival  $\frac{1}{16}$ , left free of acrylic, is now painted on, hardened, and the whole crown is polished in the manner previously described.

9. If the uppers are in need of positional correction the incisal plane and the curve of Spee are used as guides, always completing the lowers first if possible.

10. The upper crowns are constructed according to the plane of the

lower and in the same manner as the lowers.

11. Where there are edentulous spaces the abutment crowns are completed first. Undercuts are made in the occlusoproximal surfaces of the crowns facing the edentulous space and a zero mold Justi tooth is undercut mesially, distally, and occlusally and attached with soft cure acrylic to the abutment crowns (Figs. 21, 21A, 21B, 21C, and 21D).

### **Construction of Upper Anterior Aluminum-Acrylic Bridge**

This technique can be completed in two different ways, by the direct or by the direct-indirect method.

*Direct Method, First Procedure*—This procedure is accomplished in two phases:

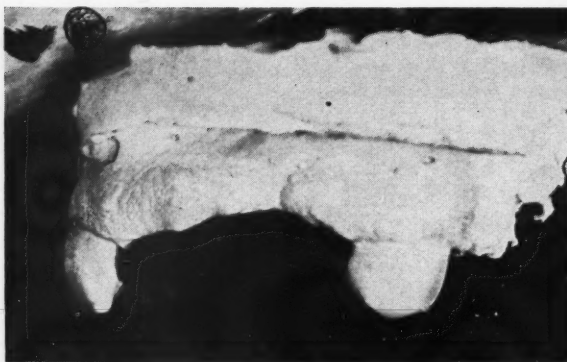
(1) Where there are edentulous spaces the anchoring aluminum abut-

ment crowns are made first. Undercuts are made with an inverted cone bur on the mesio, disto, and linguo-proximal surfaces of the finished crowns facing the edentulous area.

(2) The crowns are dried in the mouth and a soft mix of self-curing acrylic is applied to the undercut areas of the abutment crowns and the acrylic prosthetic substitutes. This measure holds them in position and at the same time gives them proper axial inclination while the patient's lower teeth are closed in centric.

(3) A blast of warm air is applied to give a quick set to the self-curing acrylic. When hardened it is removed and dipped in hot water to complete setting. It is then replaced in the mouth; additional prosthetic teeth, if needed, are added and the same procedure is followed until the last abutment tooth is reached.

(4) The bite-plane described ear-



**22 (top left).**

*Model presentation of abutment aluminum crowns and edentulous areas.*



**23A (bottom left).**

*Labial view of attached teeth.*



**23 (top right).**

*Lingual view of ground-in teeth with undercuts for attachment.*



**23B (bottom right).**

*Another labial view of attached teeth.*

lier is added. The bridge is removed, polished, and temporarily cemented.

#### *Direct Method, Second Procedure*

—This method is used to construct a bridge to be used as an immediate substitute after extraction of teeth.

(1) The abutment crowns are completed and cemented temporarily in the mouth.

(2) Surgery between abutment teeth is completed.

(3) The abutment teeth are removed, washed, dried, and serrated mesially and lingually.

(4) Replacements are ground to fit the newly extracted areas, undercuts are made in the artificial substitutes with an inverted cone bur in the linguoproximal surfaces leaving the labioproximal surface intact.

(5) The serrated abutment teeth are dried and freshly mixed soft self-curing acrylic is applied to the under-

cuts on the abutments as well as on the immediate substitute teeth. They are immediately placed in position. Warm air is applied to aid setting.

(6) With each additional attachment the following acrylic replacement is similarly attached until the final abutment is reached. After adding the bite-plane as described in the first procedure, the bridge is removed, polished, and temporarily cemented. After complete surgical shrinkage, the bridge is removed, fresh self-curing acrylic is added to the ridge lap of the replacement teeth, the bridge is replaced in the mouth, the acrylic allowed to set. The bridge is then removed for final polish and is cemented with temporary cement.

#### **Direct-Indirect Method**

1. After the abutment aluminum-acrylic crowns have been made and

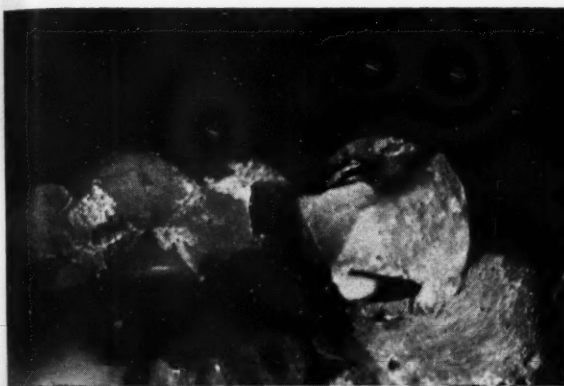
cemented temporarily in place, impressions in alginate are taken and models poured (Fig. 22).

2. The teeth to be replaced are cut off the model, and the artificial substitute prepared and ground into place on the model. They are joined to each other lingually in the undercut areas made previously (Figs. 23, 23A, and 23B).

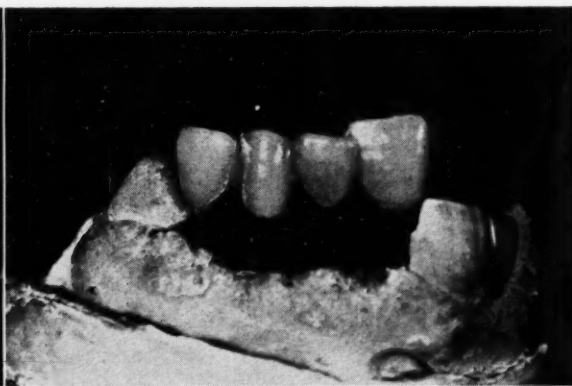
3. The replacement is adjusted in the mouth and attached to the abutment crowns with self-curing acrylic (Figs. 24 and 24A).

*Procedure Repeated* — The final procedures are as described previously.

*Final Construction and Restoration* —The patient is permitted to wear the anterior and posterior aluminum bridges for about two months so that the new reflex pattern becomes more definitely ingrained and predominant.



**24 (top left).**  
*Lingual undercut for attachment to abutment crown in mouth.*



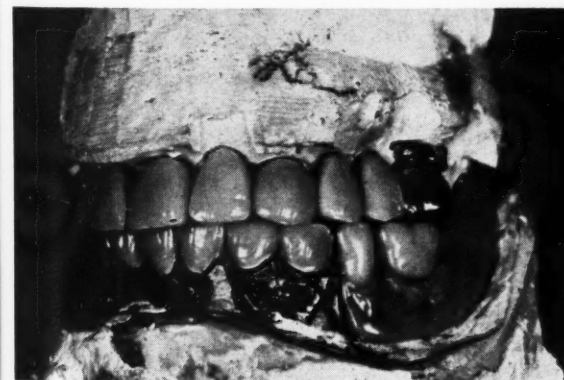
**24A (top right).**  
*Completed segment ready for transfer to mouth for final attachment.*



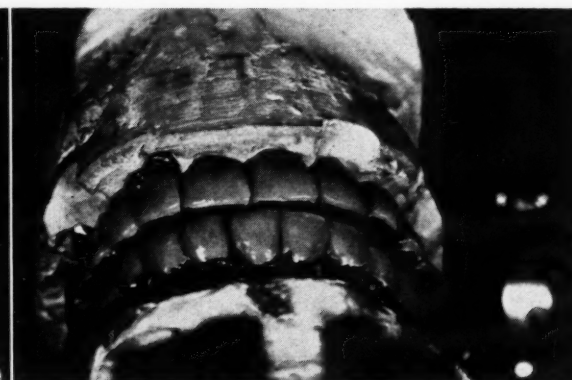
**25 (bottom left).**  
*Aluminum plastic crowns in centric closure with the mandible repositioned.*



**26 (bottom right).**  
*Anterior bite plane (segmented) and posterior temporary construction.*



**27.**  
*Case completed showing precision lingual bar as part of construction.*



**28.**  
*Lower anterior incisors occluding with cast cingulae of uppers.*

After this length of time while one segment of the temporary bridgework is kept intact construction is begun posteriorly on the lower. Construction

of the upper opposing elements is then completed. When that is finished, the opposite posterior segments are undertaken, leaving the anteriors for final

construction and restoration (Figs. 25, 26, 27, and 28).

57 West 57th Street



# Filling Root Canals in Deciduous Teeth

## BY AN INJECTION TECHNIQUE

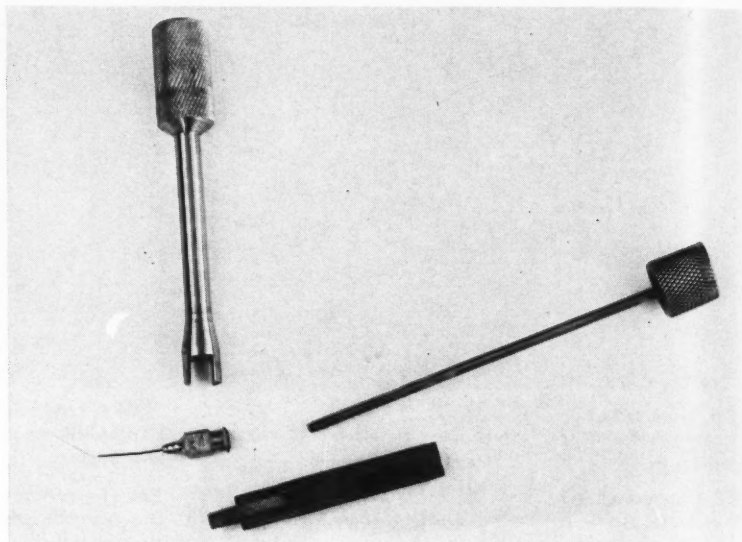
MARTIN GREENBERG, D.D.S., Ithaca, New York

### DIGEST

*This article presents a new technique for filling the canals of deciduous teeth by means of a heavy paste which is forced through a narrow gauge needle. The procedure is described in detail.*

### Preferred Material

It is generally agreed that the best root canal filling material for deciduous teeth is a slowly resorbable cement. There are many good root canal cements which resorb slowly; the cement preferred, however, is Pro-Co-Sol's Root Canal Cement® chiefly be-



1. Shows parts of the special syringe.

<sup>1</sup>Nosonowitz, David M.: Endodontics for Deciduous Molars, New York D. J. 26:235-239

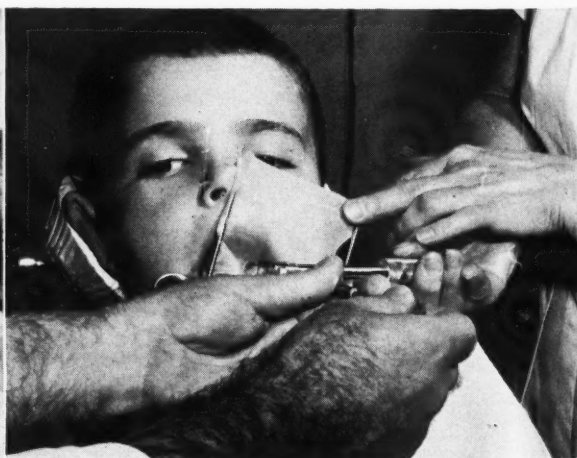
(June-July) 1960.

<sup>2</sup>McElroy, S. L., and Wach, E. C.: Endodon-

tic Treatment with a Zinc Oxide Canada Balsam Filling Material, JADA 56:801-806 (June) 1958.



2. Insertion of the root canal cement into the hub-end of the needle.



3. The needle is in place in the root canal. The assistant stabilizes the syringe with a small wrench while the plunger is being turned.



cause of its slow setting quality and smooth consistency.

### Procedure

The technique is based on the use of a specially designed syringe which can force heavy paste through an extremely narrow gauge needle.

**Special Design**—This syringe (designed by Mr. I. Katz, Manager of Consultants, General Electric, Ithaca, New York) consists of an internally threaded barrel with a threaded hub, a threaded plunger, threaded Luer-Lok needle, and a small wrench (Fig. 1).

**Three-Quarter-Inch Needle Used**—The needles should range from gauges 23 to 25 and their bevel should be removed. Three-quarter-inch lengths are most satisfactory.

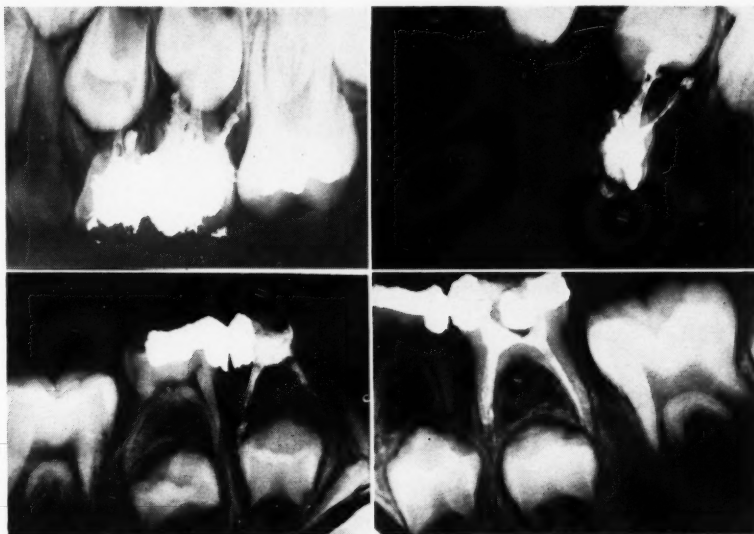
**Heavy Paste Mixed** — When the tooth is prepared for filling the paste is mixed to a heavy consistency, 3 portions of powder to 2 drops of liquid (the catalyst is omitted).

### Steps in Procedure

1. The paste is placed in the hub-end of the needle.
2. The needle is assembled on the syringe barrel.
3. The plunger is turned until a small amount of paste is extruded.
4. The needle is then inserted into a canal and as the cement is forced out, the needle is slowly withdrawn. It is helpful to have an assistant stabilize the syringe with the small wrench while the plunger is being turned (Fig. 3).

### Apparatus Easily Cleaned

All elements of the apparatus can be easily cleaned even if the cement hardens completely in the syringe and needle. Heat will soften any and all



**4A, 4B, 4C, and 4D.**

*Shows a series of cases of root canals in deciduous teeth that have been filled by the injection technique.*

of the root canal cements. Heating the syringe gently over a bunsen burner flame will soften the paste so that the

syringe can be disassembled and cleaned.

326 North Geneva Street

### Attention: ALL YOUNG DENTISTS

To encourage young dentists to contribute to the dental literature, DENTAL DIGEST offers a \$100 Series E, U.S. Saving Bond for all regular articles accepted for publication that are submitted by dentists who were graduated 10 years or less from any dental college in the world. This award is in addition to the honorarium of \$50 that all authors receive to cover the costs of illustrations and preparation of their manuscripts.

This special award to young dentists applies for all articles submitted after 1 January 1962 and is open throughout the year 1962.

When you submit your manuscript please indicate your year of graduation from dental college.

A booklet "Suggestions to Authors" will be sent to any dentist on request.

Edward J. Ryan, D.D.S.

Editor, DENTAL DIGEST

708 Church Street

Evanston, Illinois

## Facial HERPES ZOSTER

ROBERT A. ATTERBURY, B.S., D.D.S.\*, Oak Park, Illinois, and

SUNDER J. VAZIRANI, D.D.S., M.S.\*\*\*, Punjab, India

### DIGEST

*This article discusses a common and extremely troublesome disease which is often difficult to diagnose. The etiology and historical aspects of the disorder, symptoms, and characteristic features are described. Methods of treatment which have been used successfully are suggested.*

### Definition

Herpes zoster, or shingles, is a common disease with certain unique characteristics. It is a major herpes associated with unilateral neuralgic pain. Frequently the pain is present without evidence of any characteristic skin eruption. If the facial nerves are involved, the physician or dentist may be led to believe that the source of the disease is intraoral and consequently be led to consider clinical and radiographic examination of the oral structures and possible loss of some teeth. Herpes zoster is far more severe than other types of herpes and is believed to be caused by a filterable virus.

Herpes zoster is an acute inflammatory disease, characterized by unilateral groups of small vesicles mounted on inflammatory bases, running in a zone (zoster) as far as the midline following the distribution of certain nerve trunks, and is preceded by neurologic pains, which in old people may be extremely persistent and quite severe.

\*Clinical Assistant Professor of Oral and Maxillofacial Surgery, University of Illinois, College of Dentistry and Research and Educational Hospitals.

\*\*Head and Professor of Oral Surgery, Government Medical College, Patiala, Punjab, India.

### Etiology and Incidence

The disease is believed to be caused by a filterable virus. The responsible etiologic agent appears to be closely related to the virus that causes chickenpox, if not identical with it.

*Mechanism of Transmission Unknown* — Although herpes zoster is transmissible, the exact mechanism of its spread from person to person is not clearly understood. Children exposed to adults with herpes zoster may develop chickenpox after a 14- to 18-day incubation period, and adults exposed to children with chickenpox have been known to develop herpes zoster. In general, however, herpes zoster is unusual in children and chickenpox rare in adults.

An attack of herpes zoster results in permanent immunity to other attacks.

*Possible Causes* — Herpes zoster is probably a specific infectious disease, involving the posterior spinal roots and ganglia. It is also thought to result from irritation of a posterior root ganglion of the spinal nerves by tumors, leukemia, spinal anesthesia, or an extra medullary ganglion of a cranial nerve. Symptoms of herpes zoster may be caused by any inflammation of the sensory nerve ganglion.

*Time of Occurrence* — The disease is more prevalent in the spring and fall. It occurs more frequently in persons over 45 and more men than women are affected by it.

*Contributing Factors* — Fatigue, trauma, exposure to cold and wet, and the presence of some serious debilitating organic or toxic disease predispose to herpes zoster.

*Additional Predispositions* — Other diseases that may predispose to herpes zoster are cancer of the breast, tuberculosis, Hodgkins disease, and the use of arsenical or heavy metal drugs. There is no evidence that herpes zoster associated with these diseases is basically different in these circumstances.

### Pathology

Herpes zoster was known in ancient times. The predominant pathologic lesion is located in one or more posterior spinal ganglia. There is also an involvement of the corresponding sensory dermatomes with the characteristic skin lesion. This was the foundation of early knowledge of the segmental distribution of the sensory nerve endings from each spinal nerve root to the skin.

*Involvement of Nervous System* — Recent studies indicate that, while involvement of one or more sensory posterior spinal ganglia is the predominant lesion, adjacent parts of the nervous system may be affected to a lesser degree. This tends to explain other clinical features that are often noted in herpes zoster, such as necrosis of the ganglion, the presence of lymphocytes in the spinal fluid, and a possible peripheral mononeuritis involving both the sensory and motor

<sup>1</sup>Adams, R. D.: Pathological Features of Herpes Zoster. *Bull. New England M. Center* 6:12 (Feb.) 1944.

<sup>2</sup>Baily, P.: Herpes Zoster, *Postgrad. M.* 12:127-132 (Aug.) 1952.

<sup>3</sup>Baird, P. C.: Herpes Zoster, *New England J. Med.* 228:568-577 (May 6) 1943.

<sup>4</sup>Cheatham, W. J.: The Relation of Heretofore Unreported Lesions to Pathogenesis of Herpes Zoster, *Am. J. Path.* 29:401-411 (May-June) 1953.

<sup>5</sup>Mead, S. W.: Diseases of the Mouth, ed. 5. St. Louis, The C. V. Mosby Company, 1940.

<sup>6</sup>Sutton, R. L.: Diseases of the Skin, ed. 7. St. Louis, The C. V. Mosby Company, 1928.

segmental roots as well as the spinal nerves.

**Possible Results of Neurotropic Virus Infection**—Microscopically the nervous system shows changes characteristic of a neurotropic virus infection. These lesions can explain the nerve root pain, the increase of lymphocytes in the spinal fluid, and the occasional local muscular weakness produced by this disease.

**Reaction May be Extended**—There have been cases reported in which the reaction of the nervous system to the virus is not limited to a unilateral segment of the spinal cord; large areas of the cord or brain may be involved and myelitis or meningo-encephalitis may be produced. Muscular weakness is more likely to be a problem when the ganglia of the nerves that supply the extremities are affected and especially when there is involvement of the sensory ganglion of the seventh cranial nerve which may cause a facial paralysis. With the ophthalmic form, paralysis of the extra-ocular muscles may be a sequela.

**Vesicle Formation**—Skin lesions observed along the course of the intercostal nerves, or lesions of the facial variety have an inflammatory base on which vesicles are arranged in groups and may appear on any part of the body. Only one side, as a rule, is affected (Fig. 1). The mechanism of the vesicular formation is not clear but may result either from a migration of the virus along the sensory nerves to the skin or from antidromic impulses (sensory nerve impulses

which travel in the wrong direction) which are believed to release histamine-like substances in the skin. These substances dilate the superficial vessels and produce erythema and a change in capillary permeability which allows leakage of serum and results in edema and vesicle formation.

**Duration of Infection**—Sharp neurologic pain precedes and accompanies the eruption. The fluid in the vesicles soon becomes turbid, dries up, and forms yellow-brown crusts which fall off in a few days. The disease lasts, as a rule, from one to three weeks.

### Signs and Symptoms

The herpetic virus may affect any spinal segment, the most common location being the thoracic area. The lumbar and cervical segments are occasionally involved. Involvement of the sensory ganglia of nerves to the extremities is distinctly less frequent and cranial sensory ganglia involvement, except for the upper branch of the trigeminal nerve, is rare.

**Involvement of Fifth and Seventh Cranial Nerves**—Herpes zoster involving the fifth and seventh cranial nerves requires special comment. The first branch of the trigeminal nerve supplies the cornea of the eye. When the virus spreads over this nerve, it may involve the cornea with the possible consequence of other serious ocular sequelae. These patients should have ophthalmic consultation and usually should be hospitalized be-

cause of the possible grave effects of this disease on the eye. Involvement near the eye can cause permanent damage of that organ.

**Results of Seventh Nerve Involvement**—When the seventh nerve is involved, the herpetic vesicles appear on the external ear and sometimes on the anterior pillar of the fauces and the soft palate. Facial paralysis of the affected side and deafness or vestibular disturbances singly or in combination, often accompany this herpetic eruption. Some of these combinations may remain as permanent disabilities.

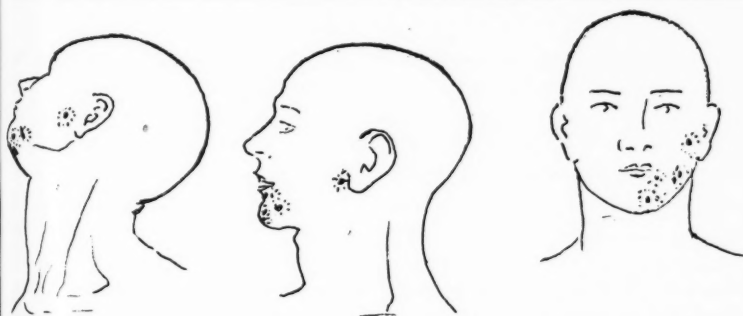
**Impacted Third Molar**—Cases have been reported of herpes zoster that appeared to be due to impacted third molars and persisted until after removal of the impacted molar. It has been noted that the oral lesions disappear more quickly than skin lesions.

**Prodromal Period May Exist**—The average duration of an uncomplicated case of herpes zoster is about two or three weeks. As in most infectious diseases there is often a prodromal period consisting of one or two days. The symptoms in this stage are slight fever, malaise, and loss of appetite. Usually symptoms are not noticed by the patient.

### Pain an Indicating Factor

The main and, often, the presenting symptom is pain in the segmental skin area in which the rash develops later. The character of the pain varies greatly but it is usually neurologic and paroxysmal. Like many nerve root pains it is worse at night and intensified by movement, coughing, and eating. At times the pain is persistent and burning in character. Paresthesia of the skin may develop spontaneously or be brought on by touching the area. On rare occasions the pain may be absent or occur simultaneously with the skin rash.

**Pre-eruptive Pain**—This may persist for one to four days before the erythema and vesicles are noted. At this stage when the pain is the only symptom, an erroneous diagnosis is often made. If pain is over the left chest, cardiac disease may be suspected. Any thoracic localization may



1.  
A diagrammatic sketch to show the distribution of the rash on the skin when the herpes zoster involves the face. The rash stops at the midline both anteriorly and posteriorly involving the mandibular division of the left trigeminal nerve.



**2.** Left lateral view showing the facial skin lesions which have formed a band limited to the segmental area, the zoster (zone) following the left trigeminal nerve distribution.



**3.** Enlarged view of dermal and tongue lesions showing the vesicular clusters on erythemic plaques.

stimulate pleurisy. Many physicians strap the chest wall with adhesive tape to minimize the pleuritic pain, a procedure which can have unfortunate results if it is used on the skin area which will shortly be the site of the vesicular eruptions of herpes zoster.

**Dental Pain Simulated**—Pain over the second and third branch of the trigeminal nerve can simulate dental pain and lead to unnecessary removal of teeth.

**Hospitalization Rarely Required**—Except for patients with the cranial type of herpes zoster most patients have been admitted to the hospital because of idiopathic pain or because the cause was wrongly diagnosed. Occasionally patients who have been admitted for other conditions develop herpes zoster while in the hospital. Nurses, when giving the patient his daily care, are often the first to report the onset of the rash.

### Characteristic Features

The most characteristic feature of the disease is the skin rash. This is limited to the dermal segment supplied by the sensory nerve from the involved sensory root ganglion. The rash is almost always unilateral and limited to one or more spinal root segments. Skin lesions appear as patches and then coalesce to form a band limited to the segmental area

(Fig. 2). The rash never crosses the midline of the body. A bilateral segmental herpetic eruption is quite unusual and, contrary to popular belief, is not necessarily fatal.

**Facial Erysipelas Simulated**—The erythemic base may be present for 24 hours or longer before the vesicular eruption appears. This also causes diagnostic confusion as the rash may be mistaken for an initial cellulitis or erysipelas. It is particularly true that when there is involvement of the first branch of the trigeminal nerve, the red rash on the forehead strikingly simulates facial erysipelas. However, an erysipelas rash is never limited to the midline of the face and it is not preceded by pain as in herpes zoster.

**Localization Aids Diagnosis**—Vesicular clusters soon appear on the erythemic plaques (Fig. 3). The rash strongly resembles that seen in a dermatitis venenata such as poison ivy. The sharp localization to a spinal root segmental area and the preceding pain make differential diagnosis possible.

**Broken Lesions Require Care**—The vesicles are at first clear, soon become turbid, and gradually break down. Skin care at this stage is extremely important. Every effort must be made to prevent secondary infection. The skin lesions should be kept covered with sterile dressings.

**Scarring May Occur**—When the

vesicles involve only the epidermis, they may heal without scarring. When the basal layer is involved, scarring may result. This is common in herpes zoster especially when the vesicles are hemorrhagic or when they become secondarily infected. The cosmetic effect of scarring is especially important in facial lesions (Fig. 4).

Once the lesions disappear, they do not usually recur.

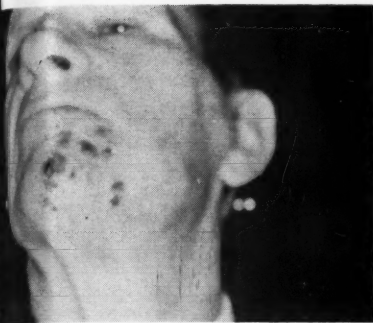
### Treatment

Since many patients recover spontaneously, the treatment of herpes zoster has been difficult to evaluate. The viral etiology of this disease makes the treatment by an antibiotic less likely than in infections due to bacteria. While antibiotics may not directly influence the virus, they help to lessen the danger of secondary infection (Figs. 5 and 6).

**Medication Utilized**—The erythema and vesicles of the skin should be protected by a covering of sterile gauze. In the average mild case the application of calamine lotion to the affected area usually relieves discomfort. Boric acid ointment is often used after the ruptured vessels have dried. Analgesics such as acetphenetidin, codeine, acetylsalicylic acid, and morphine are often required.

**Other Medical Procedures**—Some severe skin cases seem to defy ordinary

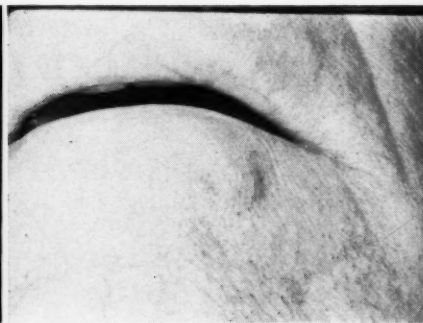




4. View of dermal lesions at twelve days. The lesions have been limited to the left side and the midline. The vesicles involve only the epidermis and appear to be healing without scarring.



5. View one month after onset of illness revealing a good cosmetic effect and normal appearing skin tissue.



6. Enlarged view one month after onset of illness showing normal tissue appearance.

treatment and may require dermatologic consultation. In some cases, relief of herpetic pain has been the result of various methods of treatment such as roentgen irradiation of the sensory root ganglion paravertebral sympathetic block with local anesthesia, autohemotherapy and the use of such drugs as sodium iodide, pituitary extract, thiamine, moccasin venoms. Several neurologic procedures have been proposed to relieve the more serious types of persistent postherpetic neuralgia.

*Cortisone May Be of Value*—Recent reports suggest that cortisone may be of value especially when the disease is severe and the patient is in the older age group.

#### Summary

Herpes zoster, or shingles, is a relatively common infectious, unilateral neurologic disorder which runs a limited course, is usually painful, may cause diagnostic confusion, often leaves residual skin scarring, occasionally causes permanent muscular weak-

ness and a persistent painful neuralgia.

The etiology, incidence, pathology, signs and symptoms, and treatment of herpes zoster have been discussed in detail as the infection applies to any area of the body, usually the thoracic area, but especially as it applies to the facial area.

1011 Lake Street (R.A.A.)  
Government Medical College  
(S.J.V.)

## "Burning Lips" Associated with Esophageal Reflux

MAURICE GARRETT, M.B. (Lond.), M.R.C.P.

### Discussion

All the patients complained of burning sensations of the buccal mucosa; and, except in one case, they were free from any abdominal pain or indigestion. They all were shown to produce esophageal reflux in the supine position.

While aphthosis affecting mucous membranes other than in the mouth must be regarded in a different light, recurrent ulceration of the buccal mucosa, with painful erosions, might profitably be re-

viewed in the light of this experience. It may be that these lesions, and perhaps those called "dyspeptic ulcers" of the mouth, may in fact be due to the action of gastric secretions on the buccal mucosa.

### Summary

Three cases are reported in which the patients complained of burning sensations of the tongue, lips, and buccal mucosa, and of an unpleasant taste in the mouth. Two of them had patches of mucosal ero-

sion, resembling aphthous ulceration.

In all three, when supine, stomach contents were shown radiographically to be regurgitated. One patient had a sliding hiatus hernia, but no such abnormality was found in the others.

Esophageal reflux is suggested as a possible cause of some so-called "dyspeptic ulcers" of the mouth.

Adapted from Original Articles, *The Lancet* No. 7165:1377 (Dec. 25) 1960.

# THE CLINICAL EVALUATION OF HYDROXYZINE:

## A New Psychotherapeutic Agent for Anxiety

### in Oral Surgery

WILLIAM B. LINENBERG, D.D.S., M.S.D.\*, Augusta, Georgia

#### DIGEST

*Many drugs have been used to relieve apprehension in nervous patients about to undergo oral surgical procedures. Until recently, however, the barbiturates were the only reliable drugs available for the acute forms of apprehension. In an attempt to discover a more effective premedication for ambulatory oral surgical patients, one that would permit the patient to remain alert during treatment, a clinical investigation of hydroxyzine (Vistaril\*\*) has been completed. A resume of the results obtained from this study is presented in this article.*

#### Chemistry

There are two forms of hydroxyzine:

(1) The oral form contains hydroxyzine as the pamoate salt which is relatively insoluble in aqueous solutions. Chemically, the capsule form is 1-(p-chlorobenzhydryl)-4-(2-hydroxyethoxy) ethyl diethylenediamine salt of 1, 1' methylene bis (2-hydroxy-3 naphthalene carboxylic acid).

(2) The injectable form contains the dihydrochloride salt of hydroxyzine which is water soluble and can be administered both intramuscularly and intravenously.

#### Pharmacologic Effects

Some of the benefits demonstrated from the drug are:

\*Formerly Resident, Department of Oral Surgery, Grady Memorial Hospital, Atlanta, Georgia. At present, Captain, Dental Corps, USA, Oral Surgeon, United States Army Garrison, Fort Gordon, Georgia.

\*\*The Vistaril used in this study was supplied by Pfizer Laboratories, Division of Pfizer & Company, Inc., Brooklyn, New York.

1. Ayd<sup>1</sup> has reported that psychotic patients have received hydroxyzine in doses of 1000 milligrams daily for periods of up to 30 days with no significant reactions.

2. A muscle-relaxant effect of hydroxyzine in experimental animals has been demonstrated by Hutcheon and co-workers.<sup>2,3</sup> Indications were that the drug depressed both the monosynaptic and polysynaptic pathways by a supraspinal site of action, probably acting on the bulbar facilitatory center. Hypertonic muscles were more relaxed than normotonic muscles.

3. One of the outstanding characteristics of hydroxyzine is its ability to muffle exaggerated responses to external or internal stimuli without dulling the patient's perspective.

4. Hydroxyzine is well absorbed from the gastrointestinal tract and is excreted in the urine in significant amounts.

5. Body metabolism is not changed, oxygen consumption is not decreased, and there is no lowering of body temperature.

6. The action of hydroxyzine administered by mouth begins in 5 to 20 minutes, the maximum effect is gained in approximately 30 minutes.

7. The effect of the intravenous injection of hydroxyzine is immediate whereas the action of the intramuscu-

lar injection is within 3 to 5 minutes.

The duration of action is 2 to 6 hours whether administered orally or injected.

#### Method of Study

**Selection of Subjects**—Two hundred and forty-two patients, both men and women, who were acutely apprehensive and nervous, were selected from the out-patient oral surgery service of Grady Memorial Hospital. Patients ranged in age from 7 to 78 years with 157 patients (65 per cent) included in the 20- to 50-year age range. No attempt was made to select patients according to age, sex, or type of surgery to be performed. The operations included extractions, the removal of impactions, and alveolectomies.

**Study Controlled**—The investigation consisted of two phases using random sampling technique:

(1) In the first phase a double-blind study of 100 patients using 50 milligrams of orally administered hydroxyzine and placebo was completed.

(2) The second phase was another double-blind study of 142 patients using 50 milligrams of hydroxyzine, 45 milligrams of secobarbital and placebo, all orally administered.

**Purpose of Double Study**—The two double-blind phases were studied in order to be as objective as possible. The investigator and patients did not know whether hydroxyzine, secobarbital, or placebo was being administered. All the drugs were packaged in the same manner.

#### Elimination of Patients in Second

<sup>1</sup>Settel, E.: Clinical Observations on the Use of Hydroxyzine in Anxiety-Tension States and Senile Agitation, *Am. Practitioner* 8:1584-1588 (Oct.) 1957.

<sup>1</sup>Ayd, F. J., Jr.: *Tranquilizing Drugs in Private Practice*, New York M. J. 57:1747 (May 15) 1957.

<sup>2</sup>Hutcheon, D. E.; Scriabine, A.; and Morris, D. L.: Cardiovascular Effects of Hydroxyzine (Atarax), *J. Pharm. & Exp. Ther.* 118:451-460 (Dec.) 1956.

<sup>3</sup>Hutcheon, D. E.; Scriabine, A.; and Schrogie, J. J.: Pharmacology of Hydroxyzine, a New Tranquilizer Drug. (Presented before the American Society of Pharmacology and Experimental Therapeutics, French Lick, Ind., November, 1956.)

**Phase**—In the first phase of the study no attempt was made to select patients according to physical status. In the second phase, however, those patients with impaired liver function, idiosyncrasy, and addiction to barbiturates were eliminated from the study.

**Degree of Sedation Noted**—Before the oral administration of the drugs blood pressure and pulse rate of the patient were obtained. Since the maximum drug effect is approached in 30 minutes, each patient was carefully observed during this period. Blood pressure and pulse were recorded again at the end of this time and the degree of tranquilization or sedation was noted before and during the operation.

### Results Classified

For the purpose of tabulating the information obtained the results of each operation were classified in three categories:

1. Good: The patient was calm and relaxed with no perceptible nervousness or apprehension. The surgery was performed with ease.
2. Fair: The patient was calm and cooperative but there was perceptible nervousness or apprehension. The surgery was performed with relative ease.
3. Poor: No tranquilizing or sedative effect was noted. The surgery was performed with great difficulty.

### Correct Dosage Evaluated

Each patient received orally 50 milligrams of hydroxyzine, 45 milligrams of secobarbital, or a placebo. By means of clinical trial and evaluation, it was determined that 50 milligrams of hydroxyzine are just enough to reduce apprehension and nervousness. For this reason, 45 milligrams of secobarbital, similar to hydroxyzine in effectiveness, were also administered.

### Results and Discussion

In the first phase of the investigation, a double-blind study was made of 100 patients using 50 milligrams of orally administered hydroxyzine and placebo. Neither the investigator nor the patients knew whether hydroxyzine or placebo was orally administered.

**Patients Receiving Hydroxyzine** — Among the 67 patients receiving hy-

droxyzine, the effects in 51 patients (76 per cent) were rated as "good," in 15 patients (22 per cent) as "fair," and in 1 patient (2 per cent) as "poor." In the latter instance the surgical procedure was carried out with great difficulty.

**Patients Receiving Placebos** — Among the remaining 33 patients who received placebos in the double-blind study, the effects in 10 patients (30 per cent) were rated as "good," in 14 patients (43 per cent) as "fair," and in 9 patients (27 per cent) as "poor." In many instances it was evident to the investigator that a tranquilizer had not been administered.

**Results Corroborated**—In order to substantiate these results another double-blind study of 142 patients was undertaken using 50 milligrams of hydroxyzine, 45 milligrams of secobarbital, and placebo with the following results:

1. Of the 142 patients studied, 47 received hydroxyzine, 49 secobarbital, and 46 placebo.
2. In the 47 patients taking 50 milligrams of orally administered hydroxyzine, 31 patients (66 per cent) were considered "good," 12 patients (26 per cent) were "fair," and 4 patients (8 per cent) were "poor."
3. Of the 49 patients receiving 45 milligrams of orally administered secobarbital, 26 patients (53 per cent) were "good," 15 patients (31 per cent) were "fair," and 8 patients (16 per cent) were "poor."
4. In the 46 patients taking placebo, 21 patients (46 per cent) were "good," 17 patients (37 per cent) were "fair," and 8 patients (17 per cent) were "poor."

**Pulse Change Slight** — An evaluation of blood pressure changes and pulse changes showed that the increases and decreases in relation to the agent administered were so minimal as to be negligible whether the drug was hydroxyzine, secobarbital, or placebo.

### Side Effects Noted

All patients were carefully questioned and observed in the clinic for evidence of drowsiness, dizziness, nausea, skin rashes, headache, and visual disturbances.

**First Phase of Investigation**—Of the 67 patients receiving hydroxyzine, 6 patients (9 per cent) had side reactions. Five patients (7 per cent) were drowsy and 1 patient (2 per cent) was dizzy.

**Second Phase of Study**—Of the 47 patients receiving hydroxyzine, 12 patients (25 per cent) had side reactions. Nine patients (19 per cent) were drowsy and 3 patients (6 per cent) were dizzy.

**Reactions from Secobarbital** — When secobarbital was given to 49 patients, 32 of them (65 per cent) had side effects. Nineteen patients (39 per cent) were drowsy, 9 patients (18 per cent) were dizzy, 3 patients (6 per cent) had a headache, and 1 patient (2 per cent) had "heart burn."

**Reactions with Placebos**—Of the 46 patients receiving placebos, 4 patients (8 per cent) had side reactions. Three patients (6 per cent) were drowsy, and 1 patient (2 per cent) was dizzy.

**Side Effects Minimal**—Other than the side effects described in the two experiments there were no other significant reactions or postoperative sequelae.

### Summary

1. Two double-blind studies, involving 242 patients, were carried out in order to determine the efficacy of using hydroxyzine in controlling nervousness and apprehension in oral surgery.

(a) In the first experiment, involving 100 patients, the effects in 51 of 67 patients, or 76 per cent, who received 50 milligrams of orally administered hydroxyzine were rated as "good." Among the patients receiving placebos the effects in 10 of 33 patients or 30 per cent were rated "good."

(b) In the second experiment, consisting of 142 patients, the effects in 31 of 47 patients, or 66 per cent, who received 50 milligrams of orally administered hydroxyzine were rated as "good." In the 49 patients taking 45 milligrams of orally administered secobarbital, 26 patients or 53 per cent were judged "good." With placebo, 21 of the 46 patients or 46 per cent were evaluated as "good."

(Continued on page 586)



# A Simplified DENTURE PROCESSING TECHNIQUE

RAPHAEL ESCOE, B.S., D.D.S., Massena, New York

## DIGEST

*This article describes a simple and rapid technique covering laboratory operations from the waxed-up denture to the finished appliance ready for milling and insertion. The entire procedure requires less than three hours. It is designed to be done in the dental office laboratory by the dentist or his assistant.*

## Half Flasking

Handler Ejecting Flasks should be used. The following steps should be taken:

1. Remove master models with wax-up from the articulator (Figs. 1 and 2). Be sure that the cast fits the flask. If it is too large trim it.
2. Using the Hanson Scale (Fig. 3) add 300 grams of French's impression plaster to 180 grams of water. Spatu-

late. (This is enough for 2 dentures.)

3. Fill the lower half of each flask with plaster.

4. Seat the master cast into the soft plaster. With a wet finger shape the mass so that there are no undercuts and remove the excess. Avoid getting plaster on the waxed-up denture. Clean the edge of the flasks.

5. As soon as the plaster has set (5 minutes after mixing) grease the exposed plaster with petroleum jelly (Fig. 4).



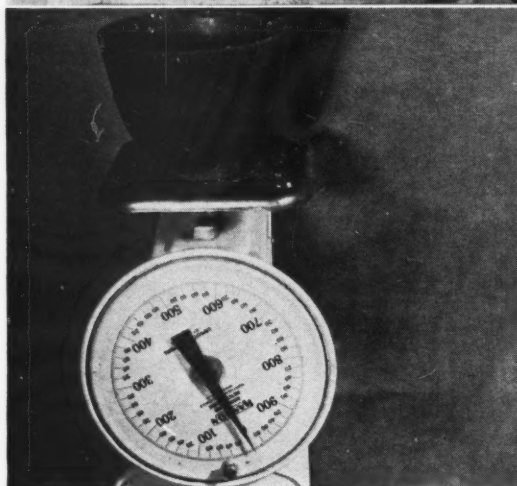
**1 (top left).**

*The waxed dentures on the articulator.*



**2 (top right).**

*The waxed dentures on master models ready for processing.*



**3 (bottom left).**

*The Hanson Scale facilitates weighing because the dial is returned to zero each time an item is weighed.*



**4 (bottom right).**

*The case half flasked and lubricated.*





**5 (top left).**  
*The full flasked case in the press.*

**6 (top right).**  
*An immersion heater (electric doughnut) in an alginite can used to heat water for the boil-out.*

**7 (bottom left).**  
*The cleaned molds painted with tin-foil substitute.*

**8 (bottom right).**  
*Preparing the plastic.*

### Full Flasking

1. Put the upper half of the flask in place.
2. Use the Hanson Scale to mix 350 grams of French's impression plaster with 210 grams of water. Spatulate.
3. Fill the flask a little at a time and pound the flask against the bench so as to vibrate the plaster against the waxed denture and teeth thus preventing air bubbles. As soon as the level of the teeth is passed dump the plaster into the flask quickly. Overfill the flask slightly.
4. Place the lid on the flask and, with the plaster still soft, put under pressure in a Hanau flask press (Fig. 5).

### Boil-Out

1. A hot plate is a poor instrument for boiling water rapidly. An immersion heater (electric doughnut) is much faster. To avoid shock do not handle the heater while plugged in. It fits an alginite can almost exactly (Fig. 6).
2. Place the flasks in boiling water for 5 minutes. This will soften but not melt the wax and baseplate.
3. Open the flasks on the bench and remove the softened wax and baseplate. Place the lower half of the flask (with master model) into boiling water.
4. Fill the upper half of the flask (with teeth) with chloroform. Allow

to stand for 5 minutes. Dip into boiling water to eliminate the chloroform.

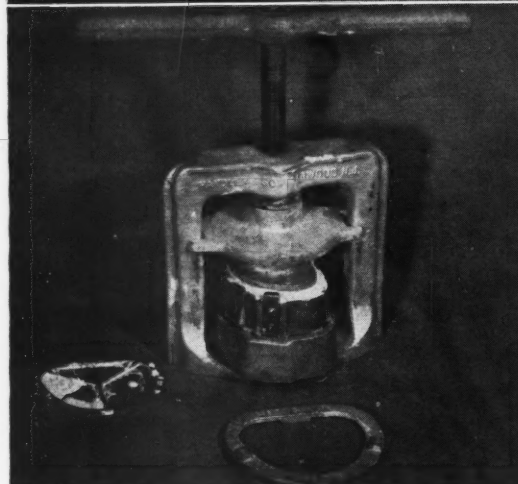
5. Examine the molds. Any remaining specks of wax can be removed with chloroform on a cotton stick. A soft brush and running water are useful for removing denture adhesive carried to the master models during the try-in.

### Tin-Foil Substitute

The entire exposed surface of plaster in the flask is painted with a tin-foil substitute such as Magicote® (Fig. 7). Avoid getting this on the teeth.

### Packing

Using Caulk's Autocure Resin complete the following steps:

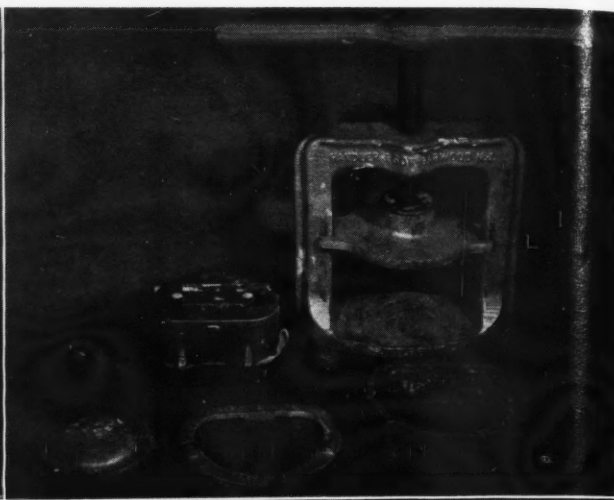


**9 (top left).**

*The packed cases. Note the flash which indicates a fully packed mold. Autocure bench cures in 45 minutes.*

**11 (bottom left).**

*Removing the upper half of the flask.*



**10 (top right).**

*The Handler Knock-out Apparatus.*

**12 (bottom right).**

*The upper half of the flask removed.*

1. Pour 10 cubic centimeters of monomer into a clean ointment jar. To this add 34 cubic centimeters of polymer. Tamp gently so that all of the powder is moistened (Fig. 8).

2. Examine every 30 seconds until the resin is of a dough-like consistency and no strings are formed when it is prodded with a spatula.

3. Roll the plastic into a cylinder and place in the upper half of the flask against the teeth. In the case of an upper denture work some of the plastic over the palate.

4. Close the flask and place under pressure in a Hanau flask press (Fig. 9).

5. In a series of over 400 dentures using a single unit for ordinary cases and two units for extra large or bulky dentures not one case was underpacked. Trial packing is a waste of time and is risky because it might strip off the film of tin-foil substitute. Moreover when a self-curing resin is used if the case is underpacked there will not be enough time to mix more acrylic. As soon as flash is seen the operator knows that the case was not underpacked.

#### **Curing**

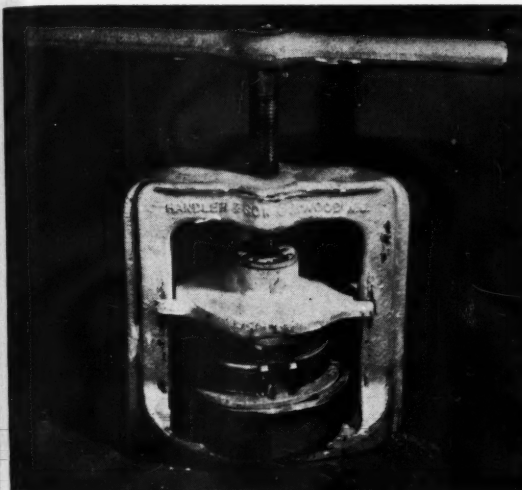
With the autocure method 45 minutes at room temperature is sufficient.

#### **Break-Out**

Using Handler Knock-Out Press and Apparatus (Fig. 10) the following steps are taken:

1. Remove the flask from the press.
2. Pry off the top with a knife.
3. Place in press in the manner shown in Figure 11. Turn the screw. The result can be seen in Figure 12.
4. Assemble the parts as shown in Figure 13 and turn the screw. The result is seen in Figure 14. The denture in a block of plaster is free from the flask.

5. Using a plaster saw cut a deep checkerboard pattern into the plaster block. Insert a knife in the cracks to



**13 (top left).**

*Removing the lower half of the flask.*

**14 (top right).**

*The denture in a block of plaster is removed from the flask.*

**15 (bottom left).**

*Releasing the denture from the plaster block.*

**16 (bottom right).**

*Cleaning the teeth.*

release the denture (Fig. 15). The mix of plaster used for investing is such that it will break away readily. Often the stone model will present more difficulty than the plaster but saw cuts and prying should remove it. Tapping with a hard instrument to break the stone should be avoided because of the great risk of fracturing the denture.

### Finishing

1. Using an inverted cone bur remove any acrylic or plaster which may be on the teeth (Fig. 16). A scaler is excellent for flicking off

acrylic which may be lodged between the teeth.

2. With a raspberry stone remove the flash and smooth the denture by removing bubbles and imperfections (Fig. 17).

3. At the lathe using muslin wheels and felt cones polish with (a) wet pumice at slow speed, as soon as all of the scratches are gone; (b) Tripoli on a dry wheel at high speed; (c) Marvel polish on a dry wheel at high speed (Fig. 18).

4. At no time should the tissue surface be buffed.

5. As soon as polishing is finished

scrub the denture with hot water and detergent. It is now ready for milling and insertion (Fig. 19).

### Comments

1. This technique is designed to be done in the dental office laboratory by the dentist or his assistant. My dental assistant is a nineteen-year-old boy with a severe physical handicap. He mastered this technique after two days of training.

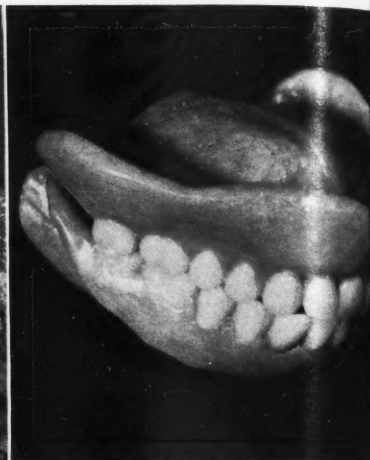
2. By using this technique one day denture service is easy which I have found to be strong encouragement to the practice of prosthetics.



**17.**  
*Removing the flash and smoothing.*



**18.**  
*Polishing at the lathe.*



**19.**  
*The dentures ready for milling and insertion.*

3. Processing dentures in the dental office is economically feasible.

4. The fact that the dentist is emancipated from the commercial labora-

tory is important.

*Main at Water Street*

## ***The Clinical Evaluation of Hydroxyzine: A New Psychotherapeutic Agent for Anxiety in Oral Surgery***

*(Continued from page 581)*

2. Side reactions were evident in both studies:

(1) In the first phase 6 patients (9 per cent) receiving hydroxyzine and 5 patients (15 per cent) receiving placebo had side effects.

(2) In the second phase, side reactions were present in 12 patients (25 per cent) receiving hydroxyzine, in 32 patients (65 per cent) taking secobarbital and in 4 patients (8 per cent) receiving placebo.

3. Fifty milligrams of hydroxyzine appear to be the starting dosage. If the patient does not respond to this initial

dose, an increase of 25 to 50 milligrams should suffice for adequate tranquilization.

4. The maximum effect of orally administered hydroxyzine is reached in approximately 30 minutes.

5. Increases and decreases in blood pressure and pulse were so minimal that they were negligible whether hydroxyzine, secobarbital, or placebo was administered.

### **Conclusions**

Hydroxyzine affords a safe and effective psychotherapeutic agent for

the tense and apprehensive patient anticipating an oral surgical procedure. With the introduction of new tranquilizing drugs the dentist does not have to rely solely on the barbiturates to reduce fear and anxiety which are present in most dental patients. Hydroxyzine closely approaches the ideal drug for premedication in ambulatory oral surgical patients; the patient remains alert during treatment and can resume normal activity immediately afterward.

*2838 Cornelia Road*

### **ADDRESS CHANGES**

When you change your address, please allow six weeks for your notice to use to become effective.

Always include old address with new address. Your postal zone number should be shown as this not only helps the post office but speeds delivery of

mail. Send address changes to:

**DENTAL DIGEST**  
1005 Liberty Ave.  
Pittsburgh 22,  
Pennsylvania



## The EDITOR'S Page

FOR ALMOST thirty years this publication has stressed the relationship between systemic and dental disease. The regular department MEDICINE AND THE BIOLOGIC SCIENCES is planned to acquaint the dentist with the nature of modern methods of treating systemic disease. There are two reasons for this editorial policy: 1) to help the dentist in the evaluation and understanding of his patient as a total human being; 2) to give the dentist information that will make it easier for him to communicate with his medical colleagues. Dentists are not prepared or advised to treat any systemic disease.

We observe with favor the increasing number of dentists who are publishing in the medical literature and are thereby acquainting their physician co-workers with the nature and treatment of dental disease. Most physicians are as poorly informed on dental disease as dentists are on systemic disease. Editors of medical and dental journals have the responsibility to help break through this barrier of ignorance that separates the two important health professions.

A notable article on periodontal disease appeared in *Medical Science*.<sup>1</sup> This publication by a dentist states the subject clearly and forcefully. The important emphasis is: 1) that periodontal disease is widespread; 2) that in most cases it is of local rather than systemic origin; 3) that it can be treated definitively and successfully by a dentist only.

As Blum shows, the physician has often been aware of the systemic nature of some gum symptoms to the exclusion of the local causes: "Although changes in the gingivae as a diagnostic aid in such systemic diseases as leukemia and frank vitamin deficiency have not gone unnoticed by the medical profession, it is doubtful that physicians appreciate the prevalence and the significance of disease of the gingivae of local origin. Consequently, when confronted with a complaint of bleeding — the most common symptom of gingival disease — the physician is inclined to think first of a blood dyscrasia,

despite the fact that it is probably one of the gingival disorders least frequently seen."

The casual, offhand, and arbitrary manner in which some physicians order patients, "Better have your teeth out," is no longer too prevalent. This disposition to ignorant authority may still exist in some places and among some physicians, but the present and growing attitude is for the physician to suggest to the patient, "Better consult your dentist." This kind of referral is more in keeping with the proper professional tradition and requires the dentist to respond as a consultant by sending the physician a detailed and written report of the diagnosis and treatment plan. In this cooperative attitude of mutual helpfulness the patient is better served: this is the single test of the efficacy of any professional treatment.

The dentist or the physician will benefit the patient most when he recalls why intelligent people desire to retain their natural teeth:

- "1. Loss of teeth connotes growing old
2. Desire for maintenance of integrity of the body
3. Maintenance of esthetics
4. Shame
5. Repugnance toward wearing dentures
6. Vocational activities."

These six good reasons for maintaining the natural dentition have emphatic psychosomatic overtones. In fact, we have made admirable progress when we recognize that *all* disease has psychosomatic interrelations. The loss of teeth is often a far deeper psychologic insult than we have understood.

Trauma to the dental supporting tissues (from malocclusions, prematurities, calculus, improperly constructed restorations, pernicious habits) can be corrected only by a dentist. We have never made this fact plain enough. These traumata are among the major reasons for the loss of teeth involved in periodontal disease. The degenerative types of periodontal disease are in lower incidence than the traumatic-inflammatory types. This is another fact that physicians should know.

<sup>1</sup>Bloom, Jack, D.D.S.: Diseases of the Gums, *M. Science* 8:513 (October 25) 1960.

1



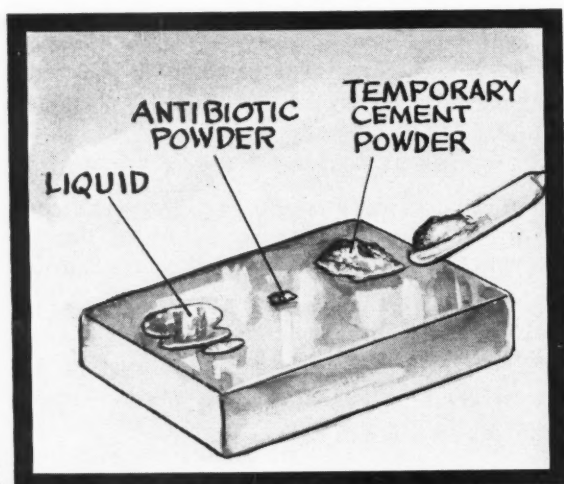
## Clinical and Laboratory S

### Separation for Silicate Restorations

J. T. Meredith, D.D.S., Kansas City

1. Provide the patient with pieces of sterile cotton cord to place between the anterior teeth one and a half hours before he comes for appointment. The use of this cord will promote gentle separation for the placement of silicate restorations.

2

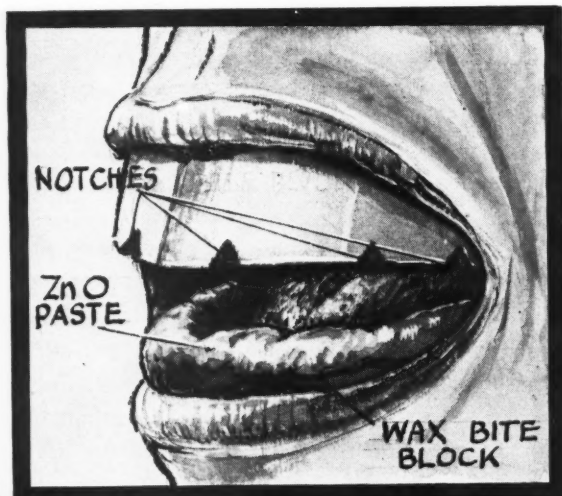


### Combination of Antibiotic Powder and Temporary Cement

Harry M. Smullen, D.D.S., Brooklyn

2. The addition of a small amount of an antibiotic powder to the mix of resin temporary cement will prevent the cement from absorbing food odors.

3



### Simplified Bite Registration Technique

Howard B. Johnson, D.D.S., Sikeston, Missouri

3. After the proper vertical dimension is obtained notch the upper wax bite block. Cover the lower bite block with zinc oxide paste. Ask the patient to swallow and bring the blocks together and hold them together until the paste sets.

### READERS are Urged to Collect \$10.00

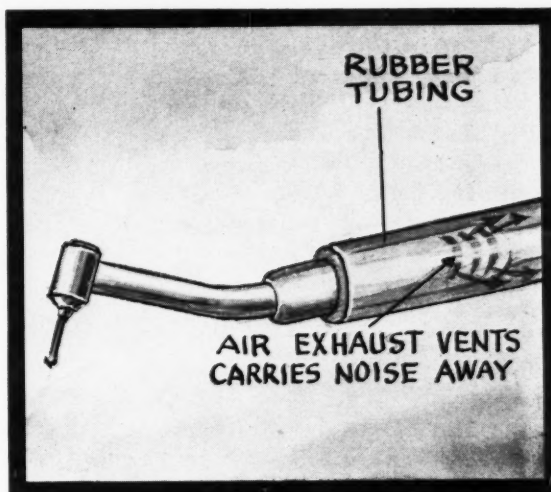
For every practical clinical or laboratory suggestion that is usable, DENTAL DIGEST will pay \$10 on publication. You do not have to write an article. Furnish us with rough drawings or sketches, from which we will make suitable illustrations; write a brief description of the technique in-

## SUGGESTIONS . . .

### Reduction of Noise in Air Turbine

Robert Hess, Jr., D.D.S., Battle Creek, Michigan

4. A strip of rubber tubing placed over the intake and exhaust openings on some air turbine handpieces will reduce the noise factor.

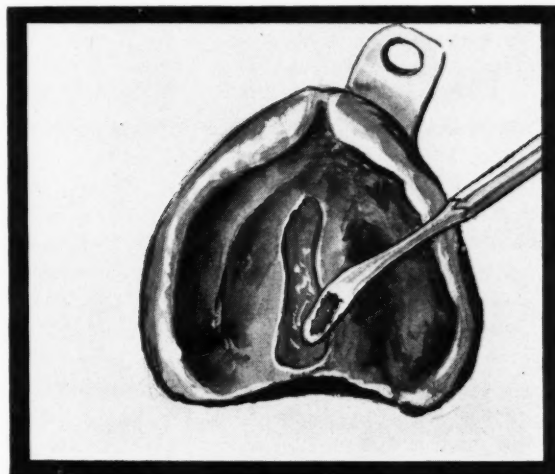


4

### Relief Area for Full Upper Dentures

Eugene M. Meckler, D.D.S., Cleveland

5. Scrape relief area in a zinc oxide type impression before securing the model. This procedure will eliminate the need for a metal relief piece placed on the model.

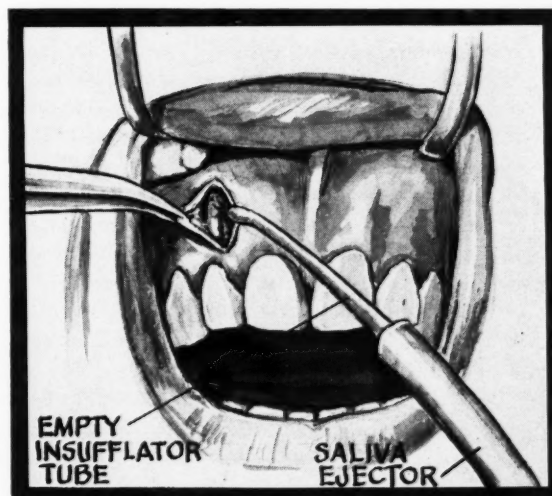


5

### Insufflator Tube Used for Suction

C. L. Chen, D.D.S., Warwick, Rhode Island

6. Attach an empty insufflator tube to the saliva ejector and use as a suction device in minor oral surgical procedures.



6

involved: and jot down the advantages of the technique. This shouldn't take ten minutes of your time. Turn to page 596 for a convenient form to use.

Send your ideas to Clinical and Laboratory Suggestions Editor, DENTAL DIGEST, 708 Church Street, Evanston, Illinois.



## Iron-Deficiency Anemia

The exchange of iron between man and environment is small and iron excretion is of little importance in determining iron balance. The cumulative daily loss in urine and stools and from skin surfaces is estimated at 1 milligram or less. Iron absorption is more active in regulation of body iron. Dietary iron is less well absorbed than iron salts. From a usual diet that contains 10 to 30 milligrams of iron, compensation to body needs ranges from less than 1 milligram for a normal male to 3 or 4 milligrams for an iron-deficient person.

Peaks in iron deficiency can occur throughout life. During infancy, an excess of about 200 milligrams is required to meet the needs of an expanding red cell mass and rapid tissue growth at a time when dietary iron is limited. This requirement is much greater if the infant is born prematurely. During the accelerated growth phase of adolescence, a second peak occurs with requirements of 200 to 300 milligrams per year. Menstruation, pregnancy, and lactation also drain the body's iron stores. These extra requirements exceed the amount which the subject can absorb from the diet.

Iron-deficiency anemia results from a deficit in available iron, that is, iron absorbed from diet plus iron reserves within the body as compared to the iron requirements of the person. During infancy, a close relationship exists between diet and iron deficiency. In the adult, however, iron-deficiency anemia is, with few exceptions, ascribable to blood loss.

A sequence of events occurs in the development of iron deficiency. When a negative iron balance is created through blood loss, pregnancy, or growth, iron is first mobilized from the iron reserve, which is 1,000 to 1,500 milligrams in the adult male. After depletion of these stores, the serum iron falls, hemoglobin synthesis is retarded, and an excess of protoporphyrin accumulates within the

# MEDICINE

## and the Biologic Sciences



erythrocyte. After several months, hypochromia, microcytosis, anisocytosis, and poikilocytosis appear.

Laboratory diagnosis begins with examination of the blood smear and determination of erythrocyte indexes. Lack of marrow hemosiderin and iron granules in the normoblasts and a low serum iron are specific findings.

Therapy should provide iron in an available form and in adequate amounts to correct the deficiency. The prescription of multiple supplements with iron is to be condemned. These supplements may obscure the diagnosis, do not improve hematologic response, and are an additional expense. The availability of ingested iron is related to solubility and reduced state. Ferrous salts are effective in low dosages and are widely used. Ascorbic acid greatly increases iron absorption through a capacity to maintain iron in the reduced state.

A limitation of oral administration is that therapy is directed specifically at the anemia. While blood values return rapidly to normal, many months of therapy are required to reconstitute tissue iron stores. Response to parenteral and oral iron is accurately

predictable, and failure of reaction usually indicates a mistaken diagnosis.

*Coleman, Daniel H.; Stevens, Alexander R.; and Finch, Clement A.: The Treatment of Iron Deficiency Anemia, Blood 10:567-580 (May) 1955.*



## Hemoptysis Caused by Bronchitis

Respiratory tract hemorrhage is not always a sign of severe pulmonary disease. Even after intensive study, one-fourth of patients with hemoptysis have no apparent source of bleeding and frequently have no further symptoms. In the search for tuberculosis and neoplasm, bronchitis may be overlooked as the etiologic factor.

The bronchial mucosa is extremely vascular and inflammation increases the friability of the mucous membranes. Even slight irritation, therefore, may traumatize the epithelium sufficiently to produce erosions and bleeding.

Blood expectorated by patients with bronchitis is bright red and contains few clots. Bleeding may be profuse but usually lasts only a few days. Dark clots are more characteristic of tuberculosis, infarction, abscess, and bronchiectasis. An antecedent chest cold or gripe, fever, and purulent sputum suggest bronchitis.

Chest films are usually negative, though the vascular markings may be slightly accentuated. Roentgen examination, however, is valuable for excluding tuberculosis, tumor, and abscess.

Hilar structures should be examined and the relationship of calcification to the bronchial tree should be determined. Calcified lymph nodes may be a sign of broncholithiasis and the patient should be questioned regarding gritty particles in the sputum. Unilateral hilar thickening suggests carcinoma.

If recurrent episodes of infection and hemoptysis suggest bronchiectasis, bronchograms should be made after symptoms subside. Broncho-

(Continued on page 592)



## **Smoother, non-narcotic analgesia... FOR POST-OPERATIVE PAIN**

After extraction, instrumentation, or in any procedure where pain is likely to occur, Anacin® is indicated. Anacin assures rapid analgesia and continues relief after the patient arrives home. Excellent tolerance with no gastric upsets. Preferred by more dentists than any other analgesic.



If you aren't receiving  
your Anacin dispenser with  
samples — please write.

**WHITEHALL LABORATORIES, NEW YORK, N.Y.**

scopic examination is preferably done during bleeding but should not be attempted when hemoptysis is profuse because excessive hemorrhage interferes with visualization.

Physical examination should include inspection of the nose and mouth for sources of bleeding, a blood pressure recording, auscultation for the murmur of mitral stenosis, and studies of the clotting mechanism. Vicarious menstruation should be considered.

Treatment consists of bed rest, gentle suppression of the cough reflex, and antibiotics. Cultures of the sputum are helpful for selecting the proper drug, but penicillin is usually helpful.

Anderson, Augustus; Buechner, Howard A.; and Ziskind, Morton M.: *Hemoptysis, Bronchial Erosion and Bronchitis*, *Ann. Int. Med.* **42**:1246-1258 (June) 1955.



### Skin Diving

Skin and self-contained underwater breathing apparatus diving are potentially dangerous and often fatal sports. It is important that both the diver and the physician understand the hazards.

The most common pathologic condition resulting from skin and scuba diving is aero-otitis media. Congestion, inflammation, and pain occur in the middle ear, often with tinnitus, vertigo, and impairment of hearing.

Degree of change varies with (1) the amount of pressure differential between the middle ear and the ambient pressure, and (2) the length of time before pressures are equalized. With slight barotrauma, the tympanic membrane retracts slightly and the malleolar vessels, as well as those in Sharpnell's membrane, dilate. Vessels in the middle ear also expand and negative pressure causes more dilation and engorgement.

Small subepithelial hemorrhages may occur in the tympanic membrane. The mucous membrane of the middle ear becomes congested and swollen,

and the eustachian tube frequently closes the tympanic cavity. If the negative pressure is sufficient, vessels in the middle ear rupture, filling the cavity with blood. With extreme barotrauma, the tympanic membrane ruptures.

The etiology of aerosinusitis is similar to that of aero-otitis media. Because of small orifices, the maxillary and frontal sinuses are most commonly affected.

During descent, the ostium is blocked and a differential in pressure ensues, resulting in a vacuum in the affected sinuses. Engorgement of blood vessels, edema of the mucosa, and hemorrhage in the sinuses equalize the pressure. When the space is filled sufficiently to equalize the pressure differential, the ostium opens.

If the scuba diver holds his breath during ascent, the lungs expand. If the ascent is from a great depth at a rapid rate, the alveoli may rupture and air embolism is likely. Two types of embolism occur, pulmonary and systemic. Pulmonary embolism may arise when a large amount of air enters the systemic circulation and goes to the right side of the heart. Foaming blood, containing large bubbles of air, forms and air is retained after each systole. The right ventricular outflow and pulmonary circulation are obstructed and the right auricle and ventricle become distended. A pronounced rise in venous pressure produces cyanosis and causes sudden death.

Turning the patient on the left side may be lifesaving, since the outflow of the right ventricle is permitted to run in the dependent position. Trapped air is churned into a froth and mixed with blood in the right ventricular cavity. Systemic embolism results from air entering the pulmonary venous channels and being propelled to the left ventricle and the systemic circulation. Ill effects are due to embolic blockage of the cerebral and coronary vessels.

Taylor, G. Dekle: *The Otolaryngologic Aspects of Skin and Scuba Diving*, *Laryngoscope* **64**:809-857 (June) 1959.



### Intestinal Polyps in Children

Polypoid lesions of the alimentary tract are frequent in children, occurring more often in boys than in girls. The lesions are usually located in the rectum and sigmoid.

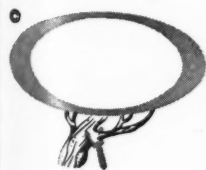
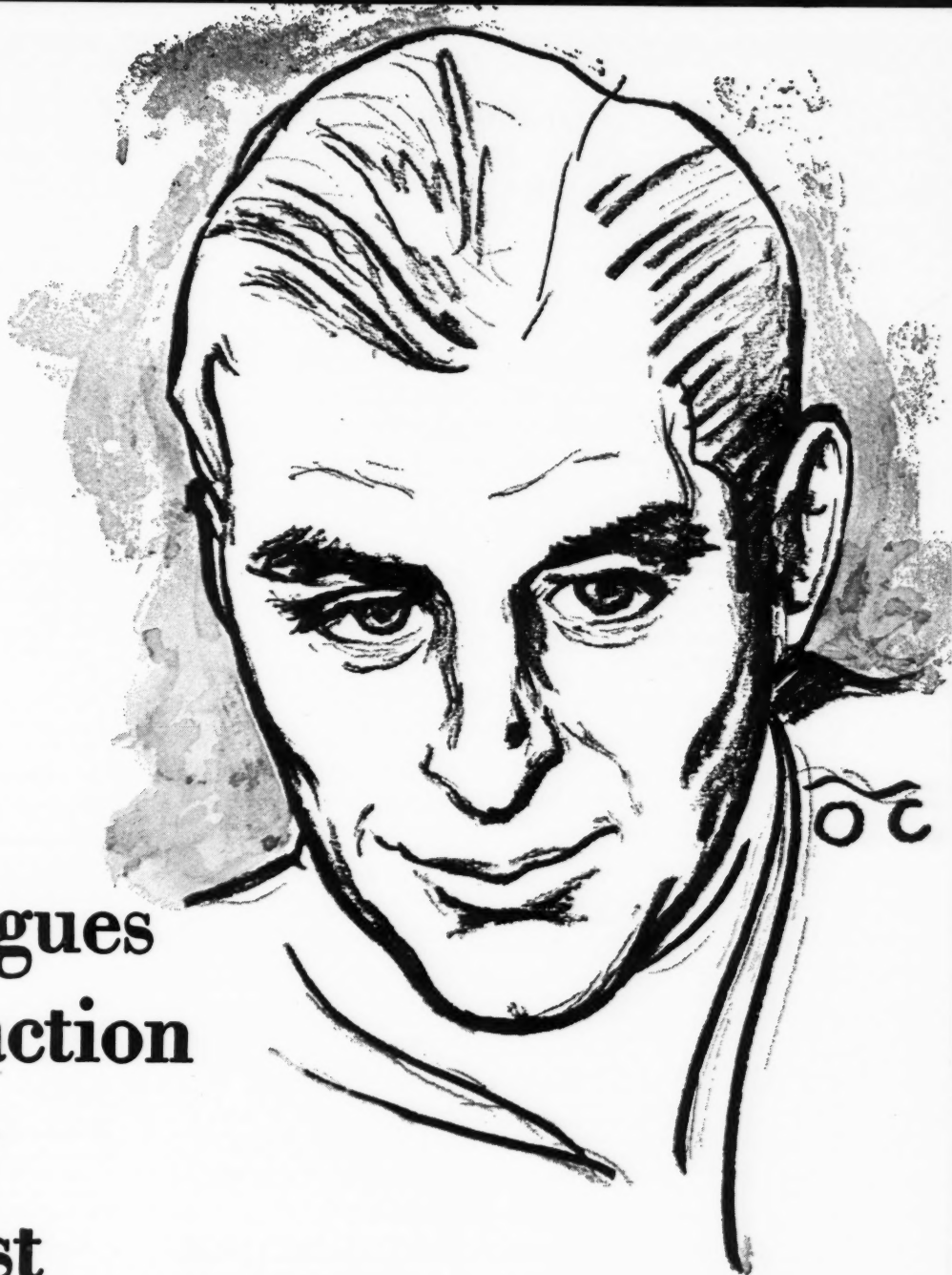
Grossly, childhood polyps have a granular external surface and are globular and gray or slightly red. The lesions are about 1 centimeter in diameter, have no villiform projections, and are not multilobular in structure as adult polyps are. Microscopic examination shows that the simple columnar epithelium of the external surface is replaced by extremely vascular granulation tissue, accounting for intermittent bleeding that is often the predominant symptom.

The body of the childhood polyp is poor in glands and rich in stroma. Cystic dilatation of the glands causes pressure atrophy of the lining epithelium composed of goblet cells. Mitotic figures are rare. Intracystic papillary budding is a constant finding. The connective-tissue stroma is infiltrated with inflammatory cells, particularly eosinophils.

Whether childhood polyps are inflammatory or neoplastic in origin is not known. Many of the lesions appear to be due to inflammation, since only the stroma tissue is increased and the glands are widely separated and appear inactive. Other polyps resemble adenomas. Isolated foci of mucous overproduction which contain signet-ring cells and show epithelial and connective-tissue destruction may produce a superficial resemblance to so-called colloid carcinoma. Childhood polyps, however, are unquestionably benign, having no cellular atypism or mitotic activity that suggests growth. The term adenocarcinoma Grade I should, therefore, not be applied to these growths.

Mauro, Jacqueline, and Prior, John T.: *Gastrointestinal Polypoid Lesions in Childhood*, *Cancer* **10**:131-137 (February) 1957.

your  
colleagues  
satisfaction  
is our  
highest  
recommendation.



**Orthodont LABORATORIES, INCORPORATED** • P. O. Box 2626 • Gravois Station • St. Louis 16, Missouri

*Serving the Orthodontist and General Practitioner  
in your area with custom made orthodontic appliances.*

*Literature and mailing conveniences sent upon request.*

Copyright 1961

# Annual Index-1961

## Anatomic Subjects

	Page
Disturbances of the Temporomandibular Joint (An Abstract), August ...	381
Frank, Leonard: The Physical Aspects of the Meniscus, June .....	279
Shore, Nathan Allen: Muscle Exercise to Prevent Clicking in the Temporomandibular Joint, April .....	166

## Anesthesia

Electrical Anesthesia (An Abstract), October .....	480
Hamburg, Harold L.: General Anesthesia for the Extended Dental Procedure, October .....	466

## Caries

Prevention of Dental Caries (An Abstract), October .....	477
Sobel, Albert E.: Interrelationship of Tooth Composition, Body Fluids, Diet, and Caries Susceptibility (An Abstract), October .....	469

## Clinical and Laboratory Suggestions

<b>January</b>	
Hendricks, Leonard M.: Cover for Instrument Cabinet. Wooden, Mary E.: Replacement of Glass Spray Bottle Tube. Tarmann, Max R.: Stabilization of Orthodontic Bands in an Impression. Stempel, Stewart: Temporary Cementation. Peacock, William L.: Reinforcement of a Shell Crown. Shaurette, Ivan T.: Combining Drugs for One Injection	28
<b>February</b>	
Gilchrist, Earl S.: Amalgam Restorations. Raecker, James A.: Marking X-rays for Comparison. McLean, A. A.: A Matrix Wedge. Waldman, David: An Oral Hygiene Adjunct. Taylor, William D.: Refacing Casting Rings. Friedman, Paul: Retention Markings on Stone Models	80
<b>March</b>	
Heimansohn, Henry: Temperature Scale for Darkroom Timer. Fischer, Henry: A Temporary Anterior Bridge. Kotick, M. M.: Determining Prematurities in Castings. Mittelstadt, Louis P.: Cement Base Mix. Sheller, Foster F.: Removing Rust from Instruments. Rowberry, S. H.: A Temporary Stopping	136
<b>April</b>	
Heimansohn, Henry: Cover for Audio-Analgesia Earphones. Easthope, D. W.: Suture Technique. Mack, W. Bernard: Accurate Seating of Abutments. Weisman, Manuel I.: Tongs for Removing Casting from Acid. Shaurette, Ivan T.: Removing Stains from X-ray Equipment. Royce, George H., Jr.: A Bite-Impression Technique	186
<b>May</b>	
Drummond-Jackson, S. L.: Thumb Tack Retractor. Hutchinson, S. M.: Air Rotor Handpiece Shield. Wiland, Lawrence: A Functional Saliva Ejector. Pleshette, Ben E.: Gauge to Determine Occlusal Clearance. Simmons, Joe J.: Air Turbine Hose Holder. Peck, Aaron: Eliminating Gagging During X-ray Exposure	238
<b>June</b>	
Malkin, Morton: Extraction of Lower Molars. Morrow, B. S.: Placement of Cotton Rolls. Smallen, Harry M.: Ap-	

plying a Separating Medium. Rusterholz, James R.: Easy Excess Medicament Bottle. Dages, Robert W.: Removal of Gold Inlays. Ashman, James D.: Removal of Hardened Amalgam from Carrier	288
<b>July</b>	
Stroud, John M.: Efficiency with Audio-Analgesia. Pedersen, R. W.: Guide for Paralleling Grooves. Burk, Rolla R., Jr.: Pickling Small Castings. McCauley, Phillip C.: Perforated Impression Tray. Ryan, Robert C.: Instrument with Cord or Tubing Attachments. Wiland, Lawrence: Control of Bleeding	338
<b>August</b>	
Heimansohn, Henry: Visual Indicator for Topical Fluoride. Lish, Jerome: Placing a Calcium Hydroxide Liner. Kielich, Bruno B., Jr.: Sterile Pumice. Hoffman, Arnold M.: Coating of Crowns before Cementation. Wiland, Lawrence: Adjusting an Occlusion. Rowberry, S. H.: A Method for Locating Pressure Areas in Dentures	384
<b>September</b>	
Weinrich, Robert W.: Model Recovery. Minehart, Paul J.: Method of Rinsing X-ray Tank. Stempel, Stewart: Control of Galvanic Shocks. Robbins, William: Topical Application of Stannous Fluoride. Heimansohn, Henry: Cleaning the Lumen of Needles Before Sterilization. Gruber, M. D.: Polishing Crowns and Inlays	436
<b>October</b>	
Spitz, Adrian N.: Twisting Ends of Orthodontic Wires. Hage, James E.: Securing Wrought Wire Clasps. Aronson, Harry L.: To Close Space Between Teeth. Goodhart, Robert H.: Improving the Taste of X-ray Film. Robbins, William: To Expedite Cementation. Wiland, Lawrence: Fitting a Gold Casting	486
<b>November</b>	
Wiland, Lawrence: Pouring Acrylic Monomer. Weigel, Ollie J.: Technique for Moisture Control. Hyder, Charles M.: Removal of a Salivary Stone. Heimansohn, Henry: Balancing a Dental Syringe. Reeder, Edward C.: Safer Wedge Insertion. Eberle, William R.: Band Measurement for Soldered Crown	538
<b>December</b>	
Meredith, J. T.: Separation for Silicate Restorations. Smallen, Harry M.: Combination of Antibiotic Powder and Temporary Cement. Johnson, Howard B.: Simplified Bite Registration Technique. Hess, Robert, Jr.: Reduction of Noise in Air Turbine. Meckler, Eugene M.: Relief Area for Full Upper Dentures. Chen, C. L.: Insufflator Tube Used for Suction	588
<b>January</b>	
Forty Million Families and Their Health	35
<b>February</b>	
Millions Proposed for Dentistry	92
<b>March</b>	
Conscience in Modern Dentistry	149
<b>April</b>	
Two Dentists and a Quarter Billion Dollars; On Another Note; The Wandering Coronary, or Nothing Stopped Roy	201

## Contra-Angles

<b>May</b>	
The Therapeutic Value of the Rocking Chair; Health Affairs in Red China	248
<b>June</b>	
Country Squire or Commercial Farmer; Birth Gifts; Dentists on Strike; Dental Affairs in Space Travel	294
<b>July</b>	
The Evil Weed Versus the Chemical Factory; Can You Tell A Neurotic When You Meet One?; Wonderful Indeed!	347
<b>August</b>	
Business Habits; To Walk or Ride; Butter and Bread Diplomacy; Human Affairs and the Sphincter Ani	390
<b>September</b>	
Diet and the Coronary Arteries; "Thank You" Light; "What Your Dentist Should Charge"	448
<b>October</b>	
The Fruits of Boredom; Bits of Medical Intelligence; Leaders are Made—Not Born	494
<b>November</b>	
The Tight Billionaire; Psychiatry in American Life; Consultation in the Hallway	547
<b>December</b>	
"The Walking Zombie Syndrome"; Medical Intelligence; There is Nothing Wrong with Youth	600
<b>Crown and Bridge</b>	
Auth, Victor C.: A Technique for Cementation of Full Coverage Restorations, August	376
Ellman, Irving A.: Wax Bite Technique, September	430
Friedman, Jay W.: Technique for Copper Band Impressions and Acrylic Veneer Crowns, December	568
Jipp, Edwin T.: The Self-curing Acrylics for Immediate Replacement, February	70
Killebrew, R. H.: Direct-Indirect Technique for Multiple Inlays and Fixed Bridges, June	271
Nordlinger, P. C.: Precise Burnished Crowns Using Metal-Faced Models, November	533
<b>Dentures—Full and Partial</b>	
Collett, Henry A.: The Incisal Relationship in the Human Dentition—Part One, January	17
Collett, Henry A.: The Incisal Relationship in the Human Dentition—Part Two, February	72
Dental Implants (An Abstract), July	333
Dilemma of Implant Surgery (An Abstract), March	122
Escoe, Raphael, D.D.S.: A Simplified Denture Processing Technique, December	582
Gold, Harvey: A Vertical and Centric Tracing Technique, April	168
Hughes, J. William: Two-Toned Diagnostic Models, March	128
Jermyn, Arthur C.: Center-Poise Balanced Partial Denture Construction for Rehabilitation of Mobile Teeth, September	420
Jones, Harold S.: Rebasings Partial Dentures, August	382
Mathis, Cecil E.: A Technique for Full Impressions Using Hydro-Cast <sup>®</sup> , July	324
McGee, George Franklin: Natural Tooth Placement and Base Contour in Full Denture Construction (An Abstract), May	246



# Quality with Economy

Clinically proved oral  
penicillin therapy that  
costs your patients less



## PENTIDS

Squibb Penicillin G Potassium

Available in these convenient dosage forms: Pentids '400' Tablets (400,000 u.) • Pentids '400' for Syrup (400,000 u. per 5 cc. when prepared) • Pentids Tablets (200,000 u.) • Pentids for Syrup (200,000 u. per 5 cc. when prepared) • Pentid-Sulfas Tablets (200,000 u. with 0.5 Gm. triple sulfas) • Pentid-Sulfas for Syrup (200,000 u. with 0.5 Gm. triple sulfas per 5 cc. when prepared) • Pentids Capsules (200,000 u.) • Pentids Soluble Tablets (200,000 u.)

\*PENTIDS® AND \*PENTID® ARE SQUIBB TRADEMARKS.

For full information,  
see your Squibb  
Product Reference  
or Product Brief.



**SQUIBB**

Squibb Quality—  
the Priceless Ingredient

Page, Harry L.: The Hinge-Bow and the Face-Bow: An Evaluation, August .....	378
Rosenberg, Sidney: Principles and Technique of Fixed Prosthesis: Part One, April .....	177
Rosenberg, Sidney: Principles and Techniques of Fixed Prosthesis: Part Two, May .....	221
Wiland, Lawrence: A Practical Procedure for Recording Changes in Vertical Dimensions of Articulated Models, August .....	366
Zatz, Victor: Active Border Seal: An Impression Procedure for Full Dentures, March .....	116
Zatz, Victor: Active Border Seal: An Impression Procedure for Immediate Dentures, October .....	474

### Diagnosis

Atterbury, Robert A., and Lock, Francis: Excisional Biopsy Technique: Report of a Case, April .....	171
Friedman, Arnold P.; Carton, Charles A.; and Hirano, Asao: Facial Pain, (An Abstract), February .....	65

### Editorials

January	
Fluoridation .....	27
February	
Periodontics .....	79
March	
Standardized Techniques .....	135
April	
Tooth Vitality and Caries .....	185
May	
X-ray Hazards .....	237
June	
Auto-immunity .....	290
July	
Stress .....	340

August	
Contamination from High Speed Dental Drills .....	386
September	
Bone Homografts .....	438
October	
Drugs in Dental Practice .....	484
November	
Exfoliative Cytology .....	540
December	
Periodontics for Physicians .....	587

### Endodontics

Greenberg, Martin: Filling Root Canals in Deciduous Teeth by an Injection Technique, December .....	574
Pryor, James J.: A Simplified Pulpotomy Technique, September .....	433
Weisman, Manuel I.: Permanent Attachment of the Hot-Bead Sterilizer to the Dental Unit, July .....	322

### Exodontics

Chernoff, Phillip M.: Removal of Teeth by Tooth Division, April .....	183
Roberts, H. J.: Estrogenic Control and Prevention of Bleeding After Dental Extraction During Long-Term Anticoagulant Therapy, June .....	285

### Fluoridation

Emslie, R. D., Veall, N., and Duckworth, R.: Chewing Gum as a Vehicle for the Administration of Fluoride: Studies with 18F (An Abstract), May .....	244
Heimansohn, Henry C.: Electrodeposition of Topical Fluorides, November .....	530

### Medical Subjects

Atterbury, Robert A., and Vazirani, Sunder J.: Facial Herpes Zoster, December .....	576
---	-----

Beauchamp, R. O.: Clinical Report on Buclamase®: A New Drug to Control Inflammation, November .....	536
Beecher, H. K., M.D.: Surgery as Placebo (An Abstract), November .....	535
Borsany, Steven, and Blanchard, Cyrus L.: Asymptomatic Enlargement of the Parotid Glands (An Abstract), February .....	88
Endocarditis (An Abstract), July .....	356
Epinephrine (An Abstract), January .....	16
Koelsche, Giles A., M.D.: Immunology in Cancer (An Abstract), November .....	530
Kouwenhoven, W. B.; Jude, James R.; and Knickerbocker, G. Guy: A Simple Method of Cardiac Resuscitation, January .....	14

### Medicine and the Biological Sciences

January	
Skin Diving — Problems; Aspiration Pneumonia; Osteomalacia; Peripheral Nerve Injuries; Food Allergy .....	30
February	
Acute Renal Failure; Acne; Surgery in the Aged; Hospital Epidemiology; Fatigue Fractures .....	82
March	
Cerebrovascular Insufficiency; Alcoholism; Acromegaly; Facial Injuries — Timing of Repair .....	138
April	
Cancer of the Colon and Rectum; Snake Bites; Melanoma; Schizophrenia; Hypnosis; Gout .....	188
May	
Diabetes—Oral Drug Therapy; Accidents Among Old Persons; Lump in the Throat; Surgery for the Cardiac Patient; Radiation Injuries .....	240

(Continued on page 597)

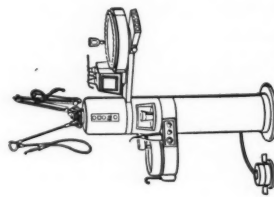
newest... most modern water supply features

S.S. WHITE DENTAL UNITS

# Selection

MODELS

Here is a unit so definitely right ... so superbly efficient that it might well have been planned with you at the designer's elbow. It's the Selection, with push-button controls, concealed instruments, accessories always at hand ... and many other streamlined features including those shown here. Ask your dealer, or write direct for full information.



S.S. WHITE DENTAL UNIT  
SELECTION MODEL II

Automatic cup filler ... a Selection convenience for your patients, and a time-saver for you. Water level can be adjusted. Mixing valves at either side of niche provide water temperatures up to 110°F.

Water is supplied to the cuspidor and to saliva ejector, independently. Siphon breaker assures uncontaminated water supply. New saliva ejector system provides 50% greater suction.



You may have the warm water syringe on the cuspidor arm or in the bracket table. Hoses for saliva ejector and syringe are retractable, enhancing the unit's appearance.



Convenient and smartly styled panel with controls for the water syringe temperature, flush and saliva ejector. Valves are clearly identified and within easy reach.

THE S.S. WHITE DENTAL MFG. CO., PHILADELPHIA 5, PA.

June	Depression and Suicidal Attempts; Rabies Prophylaxis; Nutritional Requirements of Athletes; Carcinoma of the Gall-bladder; Fingernail Growth .....	291
July	Black Hairy Tongue; Strokes—Surgical Therapy; Obesity — Dietary Treatment; Acute Infectious Arthritis; Burns Among Children .....	341
August	Asthma in Children; Staphylococcal Infections; Pleural Effusion, Determining the Time of Death; Local Anesthetics — Reactions .....	387
September	Alcoholism; Acute Brain Syndromes; Unrecognized Myocardial Infarction; Anesthetic Deaths .....	440
October	Transfusion of Cadaver Blood; Cancer of the Breast; Prostatic Cancer; Heart Murmurs .....	485
November	Blood Transfusions—Medicolegal Aspects; Foreign Bodies in Ears and Noses of Children .....	542
December	Iron-Deficiency Anemia; Hemoptysis Caused by Bronchitis; Skin Diving; Intestinal Polyps in Children .....	590

### Miscellaneous

Announcement of Books Received, March .....	134
October .....	483
Berlin, Ragnar, and Dessner, Leopold: Bruxism and Chronic Headache (An Abstract), January .....	32
Biochemical Individuality (An Abstract), October .....	473
"Burning Lips" Associated with Esophageal Reflux (An Abstract), December .....	579
Dawkins, Massey: An Edible Dental Prop (An Abstract), August .....	381
Gelb, Harold, and Arnold, Godfrey E.: Head Pain Due to Mandibular Dysfunction (An Abstract), March .....	127
Jacobson, Wayne E., M.D.; Meyer, Eugene, M.D.; and Edgerton, Milton T., M.D.: Psychiatric Contributions to the Clinical Management of Plastic-Surgery Patients (An Abstract), November .....	532
Thumb Sucking (An Abstract), February .....	64
Walker, Robert V.: Sterilization of Dental Equipment with Particular Reference to Local Anesthetic Materials (An Abstract), August .....	372

### Operative Dentistry

Eisenbrand, George F.: The Use of a Jig to Establish Parallelism, November .....	522
Electric Currents from Metal Restorations (An Abstract), March .....	156
Escoe, Raphael: The T-Band Matrix, March .....	123
Friedman, Jay W.: A Direct Approach to Fixed Full Mouth Rehabilitation, July .....	334
Miller, Edgar M.: Time and Motion Economy in Dental Practice Administration, September .....	416
Rubinstein, Joseph: The Displacement of Tissue in Elastic Impression Procedure, January .....	21
Skjorten, Petter: An Amalgam Technique: Control of Residual Mercury Content, May .....	234
Youngs, Richard S., and Schmitt, Francis M.: A Technique for Reinforcing Amalgam Restorations, June ...	282

(Continued on page 600)

## CLINICAL AND LABORATORY SUGGESTIONS

(See page 588 and 589)

### Form to be Used by Contributors

To: Clinical and Laboratory Suggestions Editor

DENTAL DIGEST  
708 Church Street  
Evanston, Illinois

From: \_\_\_\_\_

Subject: \_\_\_\_\_

Explanation of Procedure:

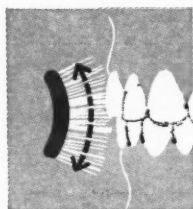
Sketch:

Suggestion submitted cannot be acknowledged or returned.

\$10 will be paid on publication for each suggestion that is used.

# A MAJOR ADVANCE IN DENTAL BRUSH DESIGN AND PERFORMANCE BROXODENT

SQUIBB AUTOMATIC ACTION BRUSH FOR TEETH AND GUMS



*gentle but stimulating,  
controlled massage of gums —  
safer, more effective, thorough  
cleaning of teeth*

*in chronic marginal gingivitis and periodontitis* "... one of the best aids in mouth hygiene to be developed in recent years ... mouth hygiene is improved in less time and with less patient effort. ... Gingival stimulation is improved with less patient education. ... Once a patient uses Broxodent, he will very seldom return to the use of the ordinary toothbrush."

G. M. STEWART, D.D.S., UNIVERSITY OF PITTSBURGH, SCHOOL OF DENTISTRY,  
PITTSBURGH, PENNSYLVANIA\*

*in handicapped patients, both children and adults* "At the end of 18 weeks 17 patients [diagnosed as severely retarded] demonstrated great improvement and 2 remained at moderate improvement. ... In the opinion of the author Broxodent fills a definite need for the oral hygiene of severely handicapped patients."

J. J. ADELSON, D.D.S., 30 W. 59TH STREET, NEW YORK 19, NEW YORK\*

*in soft tissue problems, including periodontitis and periodontosis* "Ten of the 12 patients experienced an improvement in their gingival lesions during use of Broxodent. Eleven patients had cleaner teeth when using Broxodent, and 10 reported a useful massaging effect with the instrument."

W. F. MAGUIRE, D.D.S., VETERANS ADMINISTRATION HOSPITAL, BROCKTON, MASSACHUSETTS.\*

BROXODENT® is a trademark

\*Clinical Research Notes, Vol. IV, No. 2, 1961



# MAKES IT EASIER FOR YOUR PATIENTS TO PRACTICE WHAT YOU PREACH— AUTOMATICALLY BROXODENT

SQUIBB AUTOMATIC ACTION BRUSH FOR TEETH AND GUMS

*a superior bristle—interchangeable brush unit.* Brush unit of new, special polyamide, Rilsan®—durable, flexible, superior to nylon or natural fiber, shaped to reach every dental surface. Soft bristle texture and rounded bristle ends are specially designed for automatic brush and massage action—nontraumatic to teeth and supporting tissue structure. Allergy or sensitivity to Rilsan bristles has not been observed.

*safe-to-use—easy-to-operate.* Precision, Swiss-built motor unit (110 v. A.C.) is thoroughly researched, carries the Underwriters' Laboratories Seal—self-lubricating, watertight, shockproof, specially designed for long, trouble-free service.

The patient merely attaches his personal brush unit and guides the instrument across buccal and lingual tooth and gum surfaces. BROXODENT automatically brushes in the recommended vertical brush motion—rapidly and efficiently cleaning every tooth surface, gently stimulating and massaging all supporting tissue structure.

*less time—less effort—less error.* BROXODENT provides the three essentials most patients are not willing or able to give for correct home care of teeth and gums—time, effort, and correct brushing and massage technique. Specifically, BROXODENT automatically assures in less than one minute the thorough cleaning and massage of teeth and gums that few persons can achieve in 3-5 minutes with an ordinary toothbrush.

*one BROXODENT motor unit serves the entire family.* Fully guaranteed for one full year, BROXODENT is supplied with two interchangeable brush units, a plastic travel case, and a convenient bathroom wall rack, at leading pharmacies, for \$19.75. Extra brush units (in a variety of colors) may be purchased separately, two for \$.98.

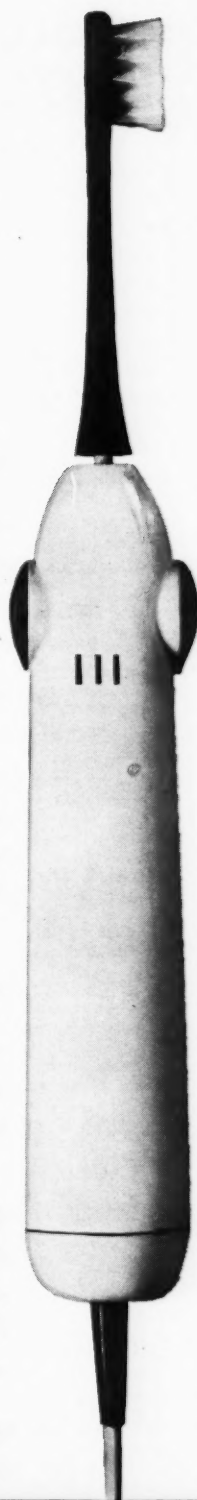
See your Squibb representative for complete details and demonstration, or write E. R. Squibb & Sons, 745 Fifth Avenue, New York 22, New York.

SQUIBB



Squibb Quality—the Priceless Ingredient

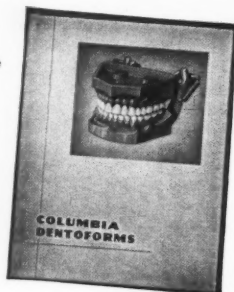
SQUIBB DIVISION **Olin** N.Y.



You can say it with words  
or you can say it with pic-  
tures, but it's best to say  
it with . . .

## COLUMBIA DENTOFORMS

If you  
do not have  
our  
Catalog  
#33,  
write  
for your  
copy  
today.



**COLUMBIA DENTOFORM CORP.**

"The House of A Thousand Models"  
and  
Home of Brown Precision Attachments

**131 East 23rd Street  
New York 10, N. Y.**

### Oral Pathology

- Magoffin, Robert L.; Jackson, Edwin W.; and Lennette, Edwin H.: Vesicular Stomatitis and Exanthem (An Abstract), August . . . . . 375
- Merril, Arthur, and Schwartz, Samuel M.: A New Chemotherapeutic Approach to the Treatment of Gingival Tissue, May . . . . . 226
- Oliver, W. M., and Fletcher, J. P.: Oral Hygiene in the Treatment of Acute Ulcerative Gingivitis (An Abstract), March . . . . . 125
- Simon, Harold J.: Attenuated Infection (An Abstract), July . . . . . 323
- Swelling of the Tongue (An Abstract), June . . . . . 284
- Treatment of Precancerous Oral Mucous Membranes (An Abstract), April . . . . . 176
- Tuft, Louis; Girsh, Leonard S.; and Ettelson, L. N.: Canker Sores: Treatment (An Abstract), August . . . . . 390

### Oral Reconstruction

- Kramer, A. G., and Kelner, Sophie: A New Physiologic Method for Repositioning the Mandible — Part One, October . . . . . 470
- Kramer, A. G., and Kelner, Sophie: A New Physiologic Method for Repositioning the Mandible — Part Two, November . . . . . 527
- Kramer, A. G., and Kelner, Sophie: A New Physiologic Method for Repositioning the Mandible — Part Three, December . . . . . 570
- Linkow, Leonard I.: The CCC Technique in Full Mouth Reconstruction, February . . . . . 60

### Oral Surgery

- Atterbury, Robert A., and Vazirani, Sunder J.: Management of Extraoral Facial Abscesses of Dental Origin, June . . . . . 266
- Atterbury, Robert A., and Vazirani, Sunder J.: The Unerrupted Palatal Cuspid, January . . . . . 23
- Behrman, S. J., and Wright, I. W.: Dental Surgery During Continuous Anticoagulant Therapy (An Abstract), April . . . . . 182
- Bulbulian, Arthur H.; Royer, R. Quentin; and Restall, Charles J.: A New Nasal Mask Specially Designed for Oral Surgical Procedures, July . . . . . 318
- Erich, John B.: Cosmetic Repair for Retraction of the Mandible, October . . . . . 478
- Friedman, Jay W., D.D.S.: Replantation of Evulsed Teeth, December . . . . . 568
- Godwin, Julius G.: Marsupialization of Mucous Cysts (Mucoceles), April . . . . . 180
- Hyder, Charles M.: Pressure Dressing for External Oral Surgery Procedures, April . . . . . 174
- Linenberg, William B.: The Clinical Evaluation of Hydroxyzine: A New Psychotherapeutic Agent for Anxiety in Oral Surgery, December . . . . . 580
- Puckett, John B.: The Effective Frenectomy, August . . . . . 373

### Orthodontics

- Brodie, Allen G.: Erratic Evolution of Orthodontics (An Abstract), June . . . . . 301
- Kelsten, Louis B.: Treatment of Unerrupted Incisors: Report of a Case, September . . . . . 427
- Shumaker, Donald B.: Interceptive Orthodontics: A Picture Clinic, July . . . . . 329

### Pedodontics

- Schmidt, Duane A.: Stainless Steel Crowns and the Child Patient—Part One, May . . . . . 229
- Schmidt, Duane A.: Stainless Steel Crowns and the Child Patient—Part Two, June . . . . . 274
- Schmidt, Duane A.: Stainless Steel Crowns and the Child Patient—Part Three, July . . . . . 326
- Schmidt, Duane A.: Stainless Steel Crowns and the Child Patient—Part Four, August . . . . . 368

### Periodontics

- Roper, Leo H., and Rosenbluth, Morton: The Rationale of Perioprosthodontia, January . . . . . 8
- Trott, J. R.: The Cross Subgingival Calculus Explorer, October . . . . . 481

### Roentgenography

- Cohen, B., and Stanford, R. W.: The Dangers of Radiation in Dentistry (An Abstract), July . . . . . 321
- Nitsche, Hermine, and Valyi, Edith: An Auxiliary Method for Intraoral X-ray Film Fixation, March . . . . . 126
- Okun, Charles: Reduction of Radiation Hazards, May . . . . . 218
- Pritchard, John: The Role of the Roentgenogram in the Diagnosis and Prognosis of Periodontal Disease (An Abstract), May . . . . . 233
- Richards, Albert G.: How Hazardous is Dental Roentgenography? (An Abstract), October . . . . . 469

# Contra- Angles



## "The Walking Zombie Syndrome"

ARTICLES in scientific publications are usually ponderous. Not so the one in the *Journal of the American Institute of Hypnosis* that describes the people who are walking about in some kind of state resembling death.

If you run into somebody who has one of these complaints he may be suffering from the "walking zombie syndrome:"

1. I feel dull and listless all the time
2. I am completely emotionless
3. Nothing means anything to me anymore
4. I really have no vitality
5. I just don't take any interest in things anymore
6. I feel like I have lost my personality
7. I am just existing. I don't get any thrill out of anything
8. Life has been a problem; I'm very depressed."

All of us have moments when one or all of these feelings may overtake us. The person who has no periods of feeling inadequate, without purpose, listless is exceptionally blessed. With most of us these periods of depression are associated with ill health or frustration. If we have a fairly sound psyche these episodes are self-limiting and short lived. If they persist too long we had better look for some kind of help.

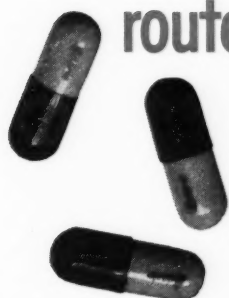
The "walking zombie syndrome" described by William J. Bryan, M.D. "does not have to do with the fear of death but rather is a condition in which the patient has accepted the fact in his subconscious mind that he is dead already.

"This syndrome is identified and characterized by case histories which

(Continued on page 602)



in  
dental  
infections  
consider  
the  
oral  
route



## easier for your patient...easier for you

# ACHROMYCIN<sup>®</sup> V CAPSULES

Tetracycline HCl with Citric Acid Lederle

easy to administer, more acceptable than injections, minimal risk of severe allergic reaction ☐ no need for sterile preparation of needle, syringe, or solutions ☐ effective against a wide range of infecting bacteria... side effects are minimal and mild. Available

for office use, or on prescription, from any pharmacy. 250 mg. (blue-yellow) capsules. Average adult dosage: 4 capsules daily.

*Precautions: The use of antibiotics occasionally may result in overgrowth of nonsusceptible organisms. Constant observation of the patient is essential.*

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York



## SUN AT THE "SANDS" IN Miami Beach

### MORE TO DO — MORE FUN AT THE SANDS!

- Fresh water Olympic-size swimming pool
- 300 feet private beach — Cabana Club
- Jamboree Lounge — TV, Radio Stars Nightly
- TV Theatre — Card Room • Sand-Z-Bar — Dancing
- Sand-i-Land — Childrens play area
- Coffee Shop — Ocean side terrace
- Efficiencies and Bedroom apartments available
- Radios in every room

THE *Sands* AIR CONDITIONED  
HOTEL AND APTS.



Ideal location—just a whisper from world famous Lincoln Road Mall, restaurants, theatres, night clubs, gifts shops, fashion salons, fishing piers, boat docks, golf courses, tennis courts and more.

**on the Ocean at Lincoln Road**



Now to  
December 20  
SPECIAL  
SUMMER  
and fall rate  
\$3 per day,  
per person

\$3

Special winter  
season rate  
starting Dec. 20  
\$5 per day,  
per person

Write today for  
folders—  
reservations:  
Leo Greene,  
Res. Mgr.,  
Sands Hotel,  
Miami Beach,  
Florida

contain statements such as 'I feel dull and listless,' 'I am completely emotionless,' 'I have no vitality or life,' 'I am very depressed and feel dead all the time.'

"Patients can be recognized only by taking a careful history using hypno-analytic techniques. The incidence of the disease is widespread, and it should be suspected when the history warrants it. The correct treatment of such a condition involves uncovering the initial sensitizing event, in which the patient accepted the suggestion that he was dead as well as uncovering the symptom producing event, and subsequent intensifying events which increase the severity of the symptoms.

"In order to find these events in the patient's past life, it is suggested that a number of areas of the histories be searched rather carefully. These include all early acute infectious diseases, accidents, injuries, operations,

war experiences, and deaths of close friends and members of the immediate family with whom the patient might be identified."

The next time a patient in your dental chair describes his feelings of un-interest, inadequacy, insecurity you may be treating a corpse that still has a heart beat and respiration: a "walking zombie."

### Medical Intelligence

• From time to time we report items of possible interest that appear in the medical journals. One from the *British Medical Journal* describes the technique of freeing the private male parts that may, by misadventure, have become entangled in a zipper that went awry: "Correspondents on this subject don't seem to realize that by cutting the lower part of the zip with pliers or wire-cutters the two halves can be separated with ease. A local anesthetic,

however, may still be necessary to remove the parts embedded in the prepuce."

• The rash of nuclear blasts set off in the atmosphere by the Russians have given us a new phobia to add to the galaxy that now weighs heavily upon us. *Nucleomitophobia* is the name of the fear of the atom.

The medical director at a hospital for mental and nervous diseases has proposed this awesome word. In the opinion of Milton A. Dushkin, M.D., expressed in *Today's Health*, people who are emotionally ill "must find a scapegoat. Anything popular will do. Nowadays it's fashionable for the emotionally ill to blame their confused state on radioactivity in their environment."

People who are sound in mind and emotions share this same fear. A Nobel Prize winner believes that the atmospheric blasts that were released late this summer have polluted the atmosphere to the extent that the incidence of leukemia and bone cancer will increase significantly.

Nobody really knows with any certainty exactly what radioactive fallout does to the human organism over a period of time.

• *Consumer Bulletin* reports "Spike heels on women's shoes are destroying the American home. That was the comment of a city building inspector in a Midwest city. The stiletto heels, particularly when they are steel tipped, are digging into vinyl, rubber, and asphalt tile, and hardwood floors as well. He estimated that greater damage was caused floors by spike heels than by ants, termites, and dry rot. One suggested solution is to introduce the Japanese custom of removing the shoes at the front door before entering the house."

This item does not mention the health hazard of spike heels. Women who walk on these stilts are a menace. If they step on somebody's foot, by accident or design, they can produce a major injury. The stiletto on the foot of a woman is as bad as one in the hand.

### There is Nothing Wrong with Youth

One of my grandsons (age 5) sug-



gested to his mother that he and his grandfather prefer periods of *relax* and freedom from the yak-yak of their women. He announced this when we set out on a hike over the sand dunes near his home. When we returned to begin our *relax* we continued our identification: he put on a pair of dime store colored glasses, took off his shoes, picked up a part of the newspaper, and appropriated one of my pipes. This was true rapport!

The psychiatrists, who often have more bizarre theories than the fantasies that obsess their patients, look rather dimly to our future generations. One prominent psychiatrist, Leopold Bellak, M.D. has expressed some dour predictions in an article in *Archives of General Psychiatry*: "I believe that, increasingly, a character structure will develop which we used to consider a character *disorder*: one characterized by shallow, transitory object relations with little subjective feeling. One has seen such characters develop out of environments that did not permit strong identifications, such as in children reared in many different foster homes and in orphanages. This type of character has also been seen in people exposed to overwhelming experiences, such as in former inhabitants of concentration camps. They appear well functioning enough, but hardly anything seems to go more than skin deep; there is a strong armor that wards off all more intense feelings.

"The European shares only a small area of his life with others; he lives behind closed doors and behind fences, does not announce his salary, sleeping habits. . . . 'But the few people who he permits with ease into the inner sanctum become his best friends with whom all is shared.'

"As for the American, almost anybody is admitted to a variety of intimacy; first names, political beliefs, divorces, salary, are all out in the open. But hardly anyone, if anyone at all, is permitted to share the real inner sanctum. Therefore, follows the sense of loneliness, the lack of belongingness.

"Doctor Bellak concluded: 'The exterior, however, may well become more civilized, literally, more urbane: greater interaction and interdepend-

ence alongside the probably still higher standard of living will probably make for manifestly more amiable relations. A kind of "cocktail party sociability" may prevail, a culture of the urbanely uninvolved.'

"While the present middle-aged and some of the young adult generation react with a sense of loneliness and lack of identity, some other and probably the future generation may have a 'shallow' character structure, though of greater cosmopolitan, urbane, smoothness and no great sense of lack of belongingness: The 'lonely crowd' may

become the 'uninvolved one.'"

I have tried to equate the theory of Doctor Bellak with my experiences with young people. I have not found them lacking in individuality, in vigor to defend their views and values, devoid of feeling.

The generation represented by the lad of five with whom I have the strong rapport, and the generation of his parents, are not wanting in conviction and individuality. Among the young people that I know and the ones that I see I have detected no signs of widespread

(Continued on page 606)

DESENSITIZE ELECTRONICALLY

**NO SHOCK TO PATIENT**

**THE LEMOSTRON**

**DESENSITIZER**

U.S. Issued Patent Nos. 2,994,324 and 1,891,113  
Other U.S. Patents Pending — Foreign Patents Pending

**A New, Efficient Way**

**To Desensitize Dentin!**

Effective relief after 30 seconds to 1 minute application

**\$19.50**

**UNIT IS SELF CONTAINED**  
**NO WIRES TO UNTANGLE**  
**PATIENT DOES NOT ASSIST**  
**JUST DIP IN SOLUTION and PAINT ON AREA**

Sodium Chloride or 2% Sodium Fluoride Solutions, when brushed on with Lemostron, effectively, and quickly desensitizes area.

For the treatment of sensitivity due to erosion — traumatic injuries — sensitive margins under clasps — post periodontal curettage — deep cavity preparations.

Batteries and complete instructions included. Replacement batteries and brushes available through your Dental Supply House.

PLEASE SEND ME LEMOSTRON DESENSITIZER ON MONEY BACK GUARANTEE

☐ Check enclosed    ☐ Send C.O.D.    ☐ Send through my Dental Supply House

NAME \_\_\_\_\_ DDD

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ ST \_\_\_\_\_

NAME \_\_\_\_\_  
Dental Supply House

ADDRESS \_\_\_\_\_

☐ Send Literature only

MAIL COUPON TO:  
**THE LEMOS CO.**  
 DENTAL DIVISION  
 4492 HALLANDALE  
 BEACH BOULEVARD  
 HOLLYWOOD, FLA.

See second cover

D.D.12

UNIVERSAL DENTAL CO.  
48TH AT BROWN ST., PHILADELPHIA 39, PA.

Please send information about Polychrome Teeth.

Dr. ....  
Address .....  
City .....

See page 559

D.D.12

TICONIUM  
ALBANY, N. Y.

Please send name of nearest Tilon Laboratory.

Dr. ....  
Address .....  
City .....

See pages 560, 561

D.D.12

ELI LILLY AND COMPANY  
INDIANAPOLIS 6, INDIANA

Please send your Product Brochure.

Dr. ....  
Address .....  
City .....

See page 562

D.D.12

THE J. M. NEY CO.  
HARTFORD, CONN.

Please send information on Ney Golds.

Dr. ....  
Address .....  
City .....

See page 563

D.D.12

THOS. LEEMING & CO., INC.  
155 E. 44TH ST., NEW YORK 17, N.Y.

Please send me descriptive and reprint material on Thermodont Tooth Paste.

Dr. ....  
Address .....  
City .....

See page 564

D.D.12

PROFESSIONAL SERVICE DEPT., SQUIBB  
745 FIFTH AVE., NEW YORK 22, N. Y.

Please send information on Orahesive.

Dr. ....  
Address .....  
City .....

See page 566

D.D.12

PETER, STRONG & CO., INC.  
207 E. 37TH ST., NEW YORK 16, N.Y.

Please send further information about the Benzodent Treatment.

Dr. ....  
Address .....  
City .....

## Myerson's Dura-Blend Teeth Provide Accurate Shade Matches for Partial Cases

The success of even the best made partial denture depends on how well you match the natural teeth in the patient's mouth. Therefore, only teeth offering the utmost in shade accuracy and naturalness should be considered in partial work.

### 6 Ways that Dura-Blend Shade Accuracy is Important to Your Practice

1. Recent tests demonstrate that the Dura-Blend shade guide matches natural teeth three times as often as the nearest competitive shade guide.
2. Dura-Blend teeth provide the greatest consistency to their own shade guide.
3. Shades are consistent from batch to batch. No matter when Dura-Blend teeth were made, they will match your Dura-Blend shade guide.
4. The shade match you secure at the chair will remain a match in any light: daylight, fluorescent, or incandescent.
5. Dura-Blend shade guides are consistent with each other. Your shade guide will match your laboratory's shade guide.
6. Dura-Blend resin teeth match Myerson's porcelain teeth so well that you can use any desired combination.



*Dura-Blend teeth provide the greatest consistency to their own shade guide.*

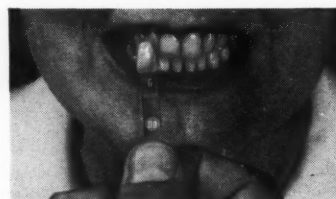
The translucency and surface lustre of natural teeth are duplicated in Dura-Blend resin teeth. They harmonize so well with adjacent natural teeth that they proved 89% undetectable by dentists in tests conducted at state dental meetings.

### Superior Durability

Dura-Blend teeth were the first to be made of cross-linked co-polymer resin. Their superior durability, proven in millions of successful cases during the past 13 years, has not yet been equalled.

If you don't have a Dura-Blend shade guide, write to:

**Myerson Tooth Corporation**  
91 Hamilton Street, Cambridge 39, Mass.



*Dura-Blend shade guide matches natural teeth three times as often as the nearest competitive shade guide.*

See page 566

D.D.12

PETER, STRONG & CO., INC.  
207 E. 37TH ST., NEW YORK 16, N.Y.

Please send information about Proffie Prophylaxis.

Dr. ....  
Address .....  
City .....

See page 566

D.D.12

PETER, STRONG & CO., INC.  
207 E. 37TH ST., NEW YORK 16, N.Y.

Please send information about Laclede Odor-Control Therapy.

Dr. ....  
Address .....  
City .....

See page 591

D.D.12

WHITEHALL LABORATORIES  
685 THIRD AVE., NEW YORK 17, N.W.

Please Anacin dispenser with samples.

Dr. ....  
Address .....  
City .....

See page 593

D.D.12

ORDONT LABORATORIES, INC.  
P.O. BOX 2626, GRAVOIS STATION,  
ST. LOUIS 16, Mo.

Please send literature.

Dr. ....  
Address .....  
City .....



**WHERE**  
*South*  
**BECKONS -**

**AND**  
*West*  
**BEGINS!**

Your vacation paradise . . . amid swaying palms, sunny skies, and clear blue waters. Featuring spacious rooms—ultra-modern apartments—colorful decor—friendly hospitality.

- Private white sand beach
- Freshwater Swimming Pool
- Free TV and 24-Hr. Phone Service
- Coffee Pot . . . for snacks or meals
- Golden Nugget . . . for cocktail sippin'
- Chuck Wagon Room, for hearty dining
- Nightly dancing • Gala entertainment

**Completely air-conditioned**  
**Open All Year 'Round . . .**

Write for colorful brochure  
and rate folder

**THE**  
**DESERT**  
**RANCH**  
ON THE GULF  
AT  
ST. PETERSBURG  
BEACH,  
FLORIDA

See page 596 D.D.12  
THE S. S. WHITE DENTAL MFG. CO.  
PHILADELPHIA 5, PA.

Please send information on Selectron XI.  
Dr. ....  
Address .....  
City .....

See pages 598, 599 D.D.12  
E. R. SQUIBB & SONS  
745 FIFTH AVE., NEW YORK 22, N. Y.

Please send me . . . . . Broxodent @ \$19.75.  
Dr. ....  
Address .....  
City .....

See page 600 D.D.12  
COLUMBIA DENTOFORM CORP.  
131 EAST 23RD ST., NEW YORK 10, N. Y.

Please send catalogue No. 33.  
Dr. ....  
Address .....  
City .....

See page 601 D.D.12  
LEDERLE LABORATORIES  
PEARL RIVER, N. Y.

Please send free information on Achromycin V Capsules.  
Dr. ....  
Address .....  
City .....

See page 602 D.D.12  
SANDS HOTEL AND APARTMENTS  
LINCOLN ROAD, MIAMI BEACH, FLORIDA

Please send your folders.  
Dr. ....  
Address .....  
City .....

See page 603 D.D.12  
THE LEMOS CO., DENTAL DIVISION  
4492 HALLANDALE BEACH BLVD.,  
HOLLYWOOD, FLA.

☐ Please send me Lemostron Desensitizer.  
☐ Please send literature only.  
Dr. ....  
Address .....  
City .....  
Dealer .....

See page 604 D.D.12  
MYERSON TOOTH CORPORATION  
91 HAMILTON ST., CAMBRIDGE 39, MASS.

Please send me additional information.  
Dr. ....  
Address .....  
City .....

See page 605 D.D.12  
THE DESERT RANCH MOTEL  
ST. PETERSBURG BEACH, FLA.

Please send your brochure and rate folder.  
Dr. ....  
Address .....  
City .....

## An Invitation to Contributors:

Since 1894 when DENTAL DIGEST was founded the pages of this journal have been open to articles contributed by dentists throughout the world. The emphasis has been, and will continue to be, on the publication of articles on all phases of clinical practice.

DENTAL DIGEST encourages the use of many illustrations to show techniques. We prefer that the text be short and that step-by-step technical procedures be presented as an illustrated "clinic on paper."

A booklet, *Suggestions to Authors*, has been prepared by the editorial staff and will be sent free on request.

Why publish? Any dentist who has developed a technique, refined a procedure, or has made a significant clinical observation has the opportunity to record these advancements and elevate his professional standing by making a contribution to the literature.

For all illustrated articles that appear in DENTAL DIGEST the author will receive an honorarium of \$50 to help defray his expense to preparing the photography or drawings.

Contributors are invited to send their articles to:

Edward J. Ryan, D.D.S.  
Editor, DENTAL DIGEST  
708 Church Street  
Evanston, Illinois

See page 606 D.D.12  
INTERNATIONAL PHARMACEUTICAL CORP.  
415 GREEN ST., NORRISTOWN, PA.

Please send me samples.  
Dr. ....  
Address .....  
City .....

See third cover D.D.12  
COOK-WAITE LABORATORIES, INC.  
1450 BROADWAY, NEW YORK 18, N. Y.

Please send information concerning Carbocaine.  
Dr. ....  
Address .....  
City .....

See fourth cover D.D.12  
THE DENTISTS' SUPPLY CO. OF N. Y.  
YORK, PA.

Please send Trubyte Slide Library Catalog.  
Dr. ....  
Address .....  
City .....

# GLY- OXIDE®

**A THERAPEUTICALLY  
EFFECTIVE PEROXIDE**

## ADVANTAGES

- Cleanses-debrides soft tissue of adherent deposits.
- Combats infection through its antimicrobial action—antibacterial even in presence of blood.
- Adheres to gingival tissue for complete chemo-mechanical action and increased penetration of exudate.
- Stability . . . assures a long shelf life and a sustained oxygen release in use.
- Safety . . . in six published studies, there were no reports of toxicity, allergization, sensitization or development of resistant micro-organisms.
- Convenience . . . applied undiluted from the specially designed non-spill plastic applicator bottle.

Supplied: 1/2 oz. and 2 oz.  
squeeze bottles

Gly-Oxide® is a flavored solution of 10% Urea Peroxide in anhydrous glycerol. U.S. Pat. #2,430,450.

**WRITE FOR  
SAMPLES**



**INTERNATIONAL  
PHARMACEUTICAL CORP.**  
415 Green St. Norristown, Pa.



(Continued from page 603)  
character disorders. There are certainly beatniks, delinquents, and misfits in society. That is nothing new. We have always had problem people who carried different labels at different times.

It is easy for anyone past age 45 to romanticize about his generation and to extol the virtues and the vigors of the generations that preceded him. I see no signs of character disorders among the Jonas Salks, the Tom Doo-leys, the Alan Shepards. The generations that follow them will also produce an equal proportion of strong

men and women. All is not lost, despite the fear of the atom.

—E. J. R.

## ***The Etiology and Therapy of Acute Pyogenic Parotitis***

**JOHN S. SPRATT, JR., M.D.,  
St. Louis, Missouri**

### **Analysis of Study**

Case histories of 178 patients treated for acute pyogenic parotitis in St. Louis hospitals between 1911 and 1959 have been reviewed. Analyses of the results of different methods of treatment used during these 49 years indicated that the septic complications and lethality have been but slightly influenced by the therapeutic methods employed. The one highly significant exception was external drainage for pyogenic parotitis caused by *Staphylococcus aureus*. The utilization of adequate external drainage for staphylococcal parotitis was attended by a significant reduction in septic complications and lethality.

### **Reaction from Invading Bacteria**

The argument has been presented that acute pyogenic parotitis results when Stensen's duct is coincidentally contaminated with a pyogenic gram positive coccus during a period when parotid salivation is depressed by dehydration or a severe primary illness. The reaction produced by the contaminating bacteria varies from mild transient edema to massive edema with glandular necrosis, suppuration, and blood stream invasion.

### **Occurrence of Fulminant Invasion**

At the present time, the more fulminant invasion occurs with antibiotic resistant *Staphylococcus aureus*, and early surgical decompression of the parotid space is generally necessary to prevent the progression of the bacterial invasion. Milder cases of acute pyogenic parotitis may be expected to subside with specific antibiotic therapy and the return of physiologic salivation.

Adapted from *Surgery, Gynecology & Obstetrics* 112:404 (April) 1961.

## **Advertising Index**

Achromycin V . . . . .	601
Anacin . . . . .	591
Benzodent . . . . .	566
Carstens Mfg. Co. . . . .	565
Columbia Dentoform Corp. . . . .	600
Cook-Waite Laboratories Inc. . . . .	Third Cover
Darvon . . . . .	560, 561
Dentists' Supply Co. of N. Y., The . . . . .	Fourth Cover
Desert Ranch Motel . . . . .	605
International Pharmaceutical Corp. . . . .	606
Lederle Laboratories . . . . .	601
Leeming & Co., Thomas . . . . .	563
Lemos Co. . . . .	603
Lilly & Co., Eli . . . . .	560, 561
Myerson Tooth Corp. . . . .	604
Ney Co., The J. M. . . . .	562
Orahesive . . . . .	564
Ordont Orthodontic Labs. Inc. . . . .	593
Pentids . . . . .	595
Peter, Strong & Co. . . . .	566
Sands Hotel . . . . .	602
Squibb & Co., E. R. 564, 595, 598, 599	
Thermodent . . . . .	563
Ticonium . . . . .	559
Tilon . . . . .	559
Universal Dental Co. . . . .	Second Cover
White Dental Mfg. Co., The S. S. 596	
Whitehall Laboratories . . . . .	591



Fill in blank below for the name  
of your nearest Tilon laboratory.

unidirectional

# T L N

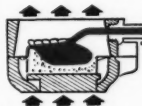
**Please send me:**

- ☐ The name of my nearest Tilon laboratory.
- ☐ Questions and Answers on Tilon.

Doctor .....

Address .....

State .....



# TILON

Product of  
Ticonium Division  
CMP Industries, Inc.  
**ALBANY 1, NEW YORK**

## tool of research

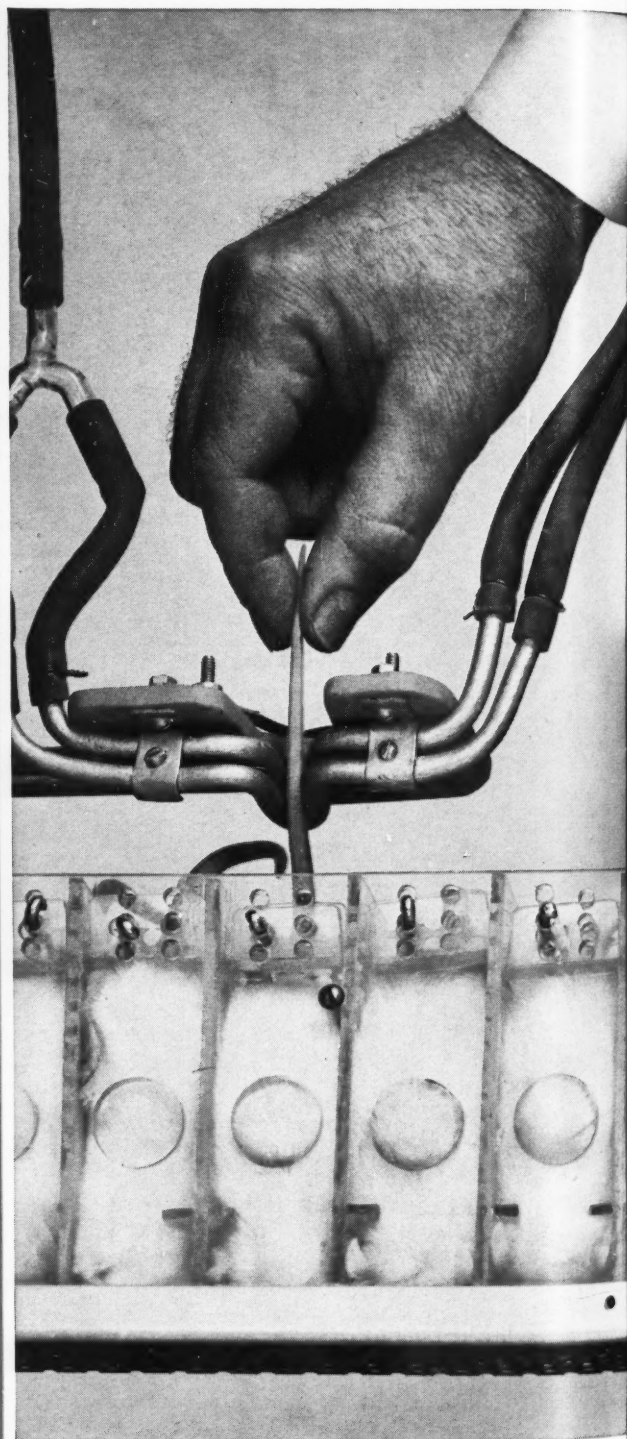
### RATTAIL HEAT TECHNIC

Twenty rats, in groups of four, are used in this modification of the method described by Davies *et al.*<sup>1</sup> The pain stimulus is provided by a heated resistance wire placed near the rats' tails. Direct contact with the hot wire is prevented by a specially designed water-cooled tail rest. Observers record the time interval that animals take to respond (tail jerk) to the heat stimulus.

Untreated rats react within three to six seconds. Any prolongation of this reaction time in animals receiving test medication is an indication of analgesia.

The rattail heat technic is one of many tests used by Lilly scientists to study the analgesic properties of compounds such as Darvon®. This unique analgesic, discovered and synthesized in the Lilly Research Laboratories, is equal to codeine in analgesic action yet has fewer side-effects.

1. Davies, O. L., Raventos, J., and Walpole, A. L.: *Brit. J. Pharmacol.*, **1**:255, 1946.  
Darvon® (dextro propoxyphene hydrochloride, Lilly)



*Rattail Heat Technic . . . valuable in preliminary screening of drugs for analgesic activity. Specially designed water-cooled tail rest prevents direct contact with hot wire.*



■ *When inflammation is present, Darvon  
combined with A.S.A.<sup>®</sup> Compound  
reduces discomfort to a greater extent  
than does either analgesic given alone.*

products of Lilly research...

*relief from dental pain*

## DARVON<sup>®</sup> COMPOUND and DARVON COMPOUND-65

Both products combine the analgesic advantages of Darvon with the antipyretic and anti-inflammatory benefits of A.S.A. Compound. Darvon Compound-65 contains *twice* as much Darvon as regular Darvon Compound without increase in the salicylate content or the size of the Pulvule<sup>®</sup>.

Formulas: **Darvon Compound**

**Darvon Compound-65**

32 mg. . . . .	Darvon . . . . .	65 mg.
162 mg. . . . .	Acetophenetidin. . . . .	162 mg.
227 mg. . . . .	A.S.A. <sup>®</sup> . . . . .	227 mg.
32.4 mg. . . . .	Caffeine . . . . .	32.4 mg.

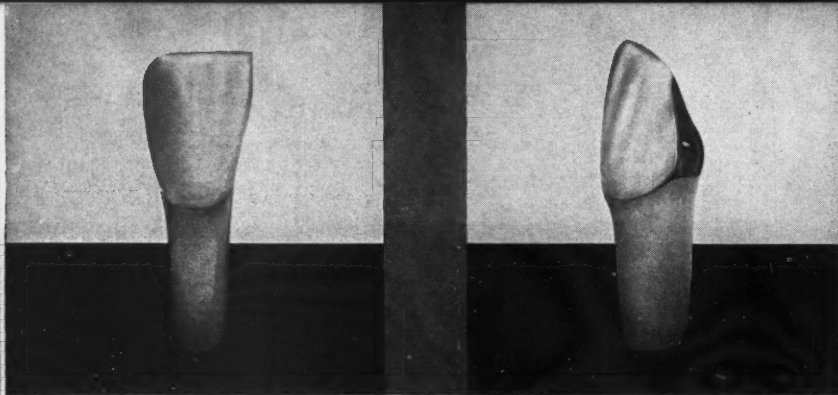
*Usual Dosage: Darvon Compound: 1 or 2 Pulvules three or four times daily.*

*Darvon Compound-65: 1 Pulvule three or four times daily.*

*Product brochure available; write Eli Lilly and Company, Indianapolis 6, Indiana.*

A.S.A.<sup>®</sup> Compound (acetylsalicylic acid, acetophenetidin, and caffeine, Lilly)  
Darvon<sup>®</sup> Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)  
A.S.A.<sup>®</sup> (acetylsalicylic acid, Lilly)

120362



## NEY-ORO P-16 CASTING GOLD FOR PORCELAIN TO GOLD RESTORATIONS

NEY-ORO P-16 is a hard, gold color crown and bridge alloy designed especially for use in porcelain fused to gold technics. The porcelain employed in combination with it should mature at a temperature of about 1800°F and should also be one especially formulated for gold-porcelain restorations.

The composition of NEY-ORO P-16 has been delicately balanced to provide the maximum bond between porcelain and gold with no discoloration of the porcelain. Repeated laboratory tests have shown that the bond is actually stronger than the porcelain so that when a composite structure is tested to destruction the break always occurs through the porcelain rather than at the interface between the metal and the porcelain. The strength of the gold is ample, even for long span bridges and is not reduced by repeated firings of the porcelain. In fact, repeated firing makes NEY-ORO P-16 stronger than in the "as cast" condition. Laboratory tests also prove that NEY-ORO P-16 has

as high, or higher, resistance to corrosion in the mouth than the usual casting golds. To accompany NEY-ORO P-16, Ney has developed NEY-ORO P-16 Solder which flows at 1925°F, low enough to permit its being flowed over NEY-ORO P-16 Casting Gold (melting range 2020°F-2170°F); and high enough to withstand the firing of the porcelains whose firing temperatures are about 1800°F.

For those interested in the increasingly popular porcelain fused to gold type of bridge, Ney offers this thoroughly researched, thoroughly tested dependable team of NEY-ORO P-16 Casting Gold and its companion solder. *The J. M. Ney Company, Hartford 1, Conn.*



## CONVENIENT COUPON SERVICE

Readers who may wish to obtain additional information on the products advertised in the Dental Digest will find convenient reply coupons in the back of each issue.

See pages 604-605

# Dental Digest

**PUBLICATION OFFICE:**  
1005 LIBERTY AVENUE  
PITTSBURGH 22, PENNSYLVANIA

ROBERT C. KETTERER ..... *Publisher*  
MERWIN B. MASSOL .... *Publisher Emeritus*  
JOHN F. MASSOL ..... *Assistant Publisher*  
DOROTHY STERLING .... *Promotion Manager*  
MARVIN ASHWORTH .. *Production Assistant*

**EDITORIAL OFFICE:**  
708 CHURCH STREET  
EVANSTON, ILLINOIS  
EDWARD J. RYAN, B.S., D.D.S. ... *Editor*  
WANDA T. PICKARD, B.A. ... *Asst. Editor*

*Manuscripts and editorial correspondence should be addressed to the Editorial Office.*

**SUBSCRIPTIONS**—In the United States, and Puerto Rico: One year, \$8; two years, \$12; three years, \$15. Three-year subscription including a copy of *Visual Education in Dentistry*, \$16. All other countries, add \$1.25 per year for postage. Subscriptions payable in advance.

**ADDRESS CHANGES**—Please allow two weeks for address change to become effective; furnish old as well as new address.

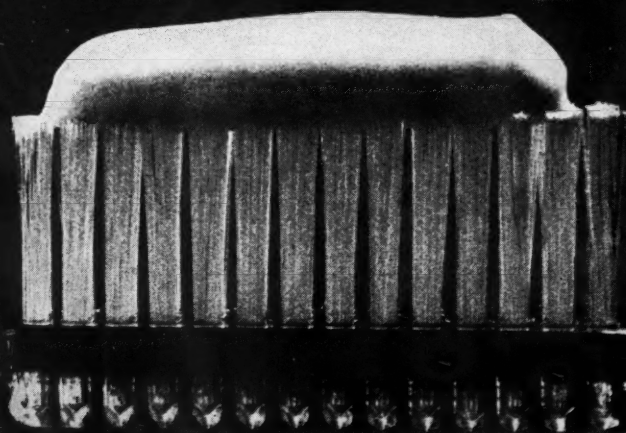
**PUBLICATION DATE**—The magazine is mailed on the fifteenth of month of issue.

**EXTENSION SERVICES** — *Visual Education in Dentistry*, printed in full color, in DENTAL DIGEST page size. Includes 31 charts from the series, *Visual Education in Dentistry*. Prices: \$1.50 per copy for DENTAL DIGEST subscribers; \$2.50 per copy for non-subscribers; \$1.50 per copy with new subscriptions at the rates named above. *Ryan Examination and Treatment Records*, carrying an anatomically accurate chart with space for examination data, lithographed on durable paper of proper texture for crayon, pencil, or ink. Price: \$1.50 per pad of 50, punched for standard loose-leaf binder. *The Castle That Was Destroyed*. Price: 100, \$15. *Your Teeth and Your Life* booklet. Prices: 20, \$1.25; 100, \$5. *Clinics on Paper* booklet, Volume 5. Includes 100 suggestions from "Clinical and Laboratory Suggestions" department: 64 pages. Price: \$1.75 to DENTAL DIGEST subscribers; \$2.50 to non-subscribers. Set of 16 Kodachrome slides and lecture material, \$18. Dial of Nutrition and Diet Diary, \$1.98. Tooth Eruption Calculator, \$1. Oral Diagnostic Signs, \$1.98. Information upon request.

**DISTRICT ADVERTISING OFFICES**—  
W. A. PETERSON, JR. .... *Eastern Manager*  
NEW YORK ..... 7 East 42nd Street  
JOHN J. DOWNES ..... *Western Manager*  
CHICAGO ..... 224 South Michigan  
CARL SCHULENBURG ..... *Southern Manager*  
ST. LOUIS ..... Syndicate Trust Building  
DON HARWAY ..... *Pacific Coast Manager*  
GLENDALE, CALIF. ... 336 North Central Ave.  
PIRNIE & BROWN .....  
..... *Southeastern Representative*  
ATLANTA ..... Rhodes-Haverty Building



# new taste



## Thermodent<sup>T.M.</sup> Tooth Paste

has a bright new taste and a white new color for greater patient acceptance. But you can be sure that Thermodent still contains the same ingredients proven so safe and effective over the past six years.<sup>1-3</sup> The latest study found Thermodent 91% effective,<sup>4</sup> further evidence that Thermodent is . . .

### fundamental in hypersensitivity

Available in two-ounce tubes at all pharmacies—only on your recommendation, of course.

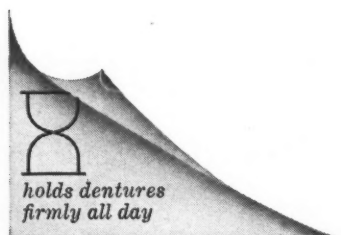
1. Fitzgerald, G.: Dental Digest 62:494 (Nov.) 1956. 2. Abel, I.: Oral Surg. 11:491 (May) 1958. 3. Toto, P. D., et al.: J. Periodontology 29:192 (July) 1958. 4. Burman, L. R., and Goldstein, A.: J. Periodontology 32:257 (July) 1961.

*Thos. Leeming & Co., Inc.* 155 East 44th Street, New York 17, N. Y.

"new once-a-day Orahesive makes the difference"



The difference is in the unique Orahesive formula, a new concept in denture adhesives. Orahesive is a combination of pectin, gelatin, and sodium carboxymethylcellulose. Once-a-day application of Orahesive is usually possible because of its unique adhesive properties. Orahesive will not dry out or relax its grip, in contrast to gum karaya or the usual gummy preparations. Orahesive is a white, tasteless powder. It is not messy, and is easy to use. One simple application of Orahesive daily to wet dentures can prevent embarrassment, and it provides increased comfort for your patients.



**SQUIBB**



*Squibb Quality—  
the Priceless Ingredient.*

A PRODUCT OF SQUIBB RESEARCH IN DENTISTRY

**Orahesive**

\*ORAHESIVE® IS A SQUIBB TRADEMARK.

Squibb Denture Adhesive Powder

# perfect reflection... by *Carstens*



## **BOILO MIRRORS**

... the ultimate in dental mirrors! Hard rhodium vacuum coated face, encased in highly polished stainless steel and specially treated to resist scratches under normal use. Boilo mirrors are guaranteed to withstand repeated sterilizing by all methods.

### ***Handy plastic storage case***

All Boilo mirrors are shipped in attractive plastic case and nested in protective polyurethane. Three styles: plain, magnifying and front surface units are available in a complete range of sizes, with or without stainless steel handles. Boilo mirror heads fit all standard handles.

**For true vision without distortion . . . use Boilo!**

**|C|M|C|**

# *Carstens* Manufacturing Company

4629 N. Ronald Avenue

Chicago 31, Illinois

*Quality Surgical and Dental Instruments since 1883*

# DOCTOR...DO YOU KNOW THE FACTS ABOUT BENZODENT® BREAK-IN?

## 10 YEARS OF CONSISTENT SUCCESS

The first product specifically formulated to answer the needs of modern dentistry for denture break-in without discomfort or anxiety, Benzodent has met the test of time since its introduction in 1951. Clinical tests of the effectiveness of this original multi-purpose aid to denture adjustment—with combined antiseptic, analgesic, and adhesive action—have been substantiated by Benzodent's widespread and constantly increasing use.



You pay less for the best—now that Benzodent comes in the widest choice of sizes to suit the needs of every practice. Space-saving carton of 36 four-gram tubes at \$9 gives lowest pennies-per-patient cost. Also available from dental dealers: units of 12 four-gram tubes (\$3.50), six quarter-ounce tubes (\$3), single one-ounce tube for chair use (\$1.50).



*Peter, Strong*  
"Plus Value" Products

© 1961 by Peter, Strong & Co., Inc.

## THOUSANDS OF SATISFIED DENTISTS

The only product of its kind that can be relied upon for simultaneous denture stabilization and pain relief—this is how Benzodent is regarded by the countless dentists using it routinely to ease patients' adjustment to new, immediate, and partial dentures.

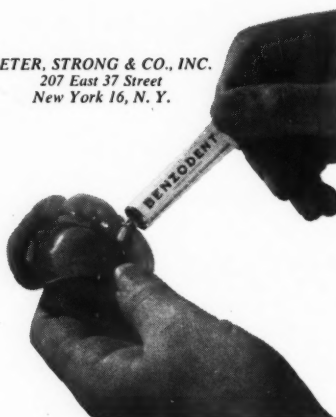
## TENS OF THOUSANDS OF HAPPY PATIENTS

Confidence and cooperation result as Benzodent comfortably encourages consistent denture wear during the break-in period, curbs post-insertion complaints and demands for emergency attention and needless trimming. The results are: better control of return-visit schedules, reduction of unbillable chair time, and greater patient appreciation of the dentist's fine prosthetic workmanship.

## ARE YOU USING BENZODENT TO ACHIEVE HAPPIER PATIENTS AND A HEALTHIER PRACTICE?

If not, order Benzodent from your dealer today, with an unconditional guarantee of full refund if not satisfied for any reason.

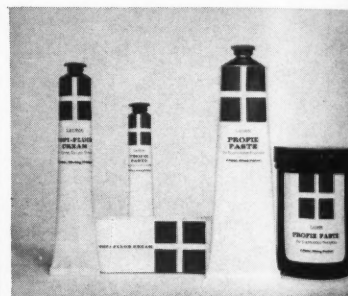
PETER, STRONG & CO., INC.  
207 East 37 Street  
New York 16, N. Y.



## Profie Prophylaxis Is Superior Way To Start Good Preventive Dentistry

Convenient-to-use, Profie paste and easy-to-mix Profie tablets and liquid safely and selectively break calculus down by unique enzyme action... with easier instrumentation, less patient trauma, pleasant taste, minimum spatter.

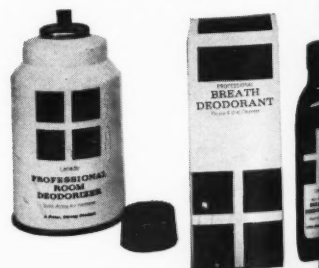
With Profie prophylaxis, efficient removal of deposits and stains assists clear x-ray interpretation and accurate diagnosis. Fast and thorough scaling of calculus and elimination of residues help check local infection, irritation, and periodontal damage. Superior cleaning and polishing induce patients to maintain dental care.



## 'Good Scents' Laclede Odor-Control Therapy Gives Your Nose A Break

Dentists work better and feel less fatigued after long hours in confined working areas when they maintain odor control in the way specially designed for their needs—spraying the Laclede Room Deodorizer three times daily, and using the Laclede Breath Deodorant from the 4-ounce bottle or handy spray dispenser.

Patients and office personnel also benefit from Laclede professional odor-control therapy. Close contacts become more agreeable, while air in operating rooms and waiting rooms stays fresh and sanitary all day long, with no "masking" fragrance.



(Advertisement)



## FOR SATISFACTORY ANESTHESIA IN ALL PROCEDURES CHOOSE **CARBOCAINE<sup>®</sup> HCl** WITH CONFIDENCE

Now, with two solutions on hand, you have a choice of preparations to serve all the anesthetic needs of daily practice.

For rapid acting,<sup>1,2</sup> well tolerated<sup>1-5</sup> anesthesia of comparatively BRIEF DURATION<sup>6</sup>— as in high-speed restorative procedures... simple extractions... children's dentistry... and whenever vasoconstricting agents are contraindicated — choose new CARBOCAINE 3% without vasoconstrictor.

For satisfactory<sup>4</sup> anesthesia of LONGER DURATION, well tolerated, with a wide margin of safety<sup>3,7</sup> — as in oral and periodontal surgery... quadrant dentistry... pulp canal work — CARBOCAINE 2% with Neo-Cobefrin<sup>®</sup> is the anesthetic of wide professional acceptance.

Choose CARBOCAINE in any case... use CARBOCAINE with the full assurance you are using an anesthetic that meets the highest standards of efficiency and performance.

References: 1. Berling, C. Carbocaine in local anaesthesia in the oral cavity. *Odont. Revy.* 9:254 1958. 2. Feldmann, G., and Nordenram, A. The anaesthetic effect of Carbocaine and lidocaine. *Svenska Tandl. Tidsskr.* 52:531 1959. 3. Weil, C., Welham, F. S., Santangelo, C. and Yackel, R. F. Clinical evaluation of mepivacaine hydrochloride by a new method. *J.A.D.A.* 63:26 July 1961. 4. Dobbs, E. C., and Ross, N. The new local anesthetic, Carbocaine. *New York State D. J.* (to be published). 5. Wessman, T. A private practitioner's view of a local anesthetic without a vasoconstrictor. *Sverig. Tandl. Tidn.* No. 3 1959. 6. Schwarzkopf, H. A further advance within the field of odontological local anesthesia. *Deutsche Zahnärz. tebl.* No. 24 1959. 7. Ross, N., and Dobbs, E. C. A preliminary study on Carbocaine. *J.A.D.S.A.* 7:4 Nov. 1960.

SHORTER DURATION



LONGER DURATION

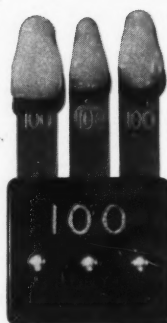


**COOK-WAITE**  
*Laboratories, Inc.*

1450 Broadway • New York 18, N. Y.

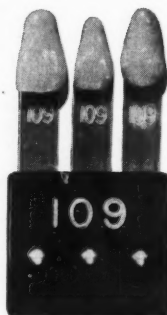
CARBOCAINE AND NEO-COBEFRIN (BRAND OF LEVO-NORDEFRIN) ARE THE TRADEMARKS (REG. U.S. PAT. OFF.) OF STERLING DRUG INC.

# look what's new in **Bioblend**



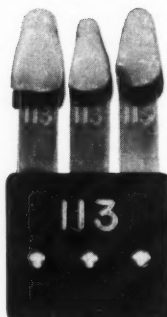
## **BLEND 100.**

The lightest and most youthful vital gray blend with a slightly darker gray cuspid as is usually found in all natural teeth. In the range of Trubyte Bioform Shade B 59.



## **BLEND 109.**

A medium red blend with a noticeably translucent incisal. Slightly darker than Trubyte Bioform Shade B 65.



## **BLEND 113.**

A most useful dark gray blend with unusual vitality. Excellent for the dark brunette type.

**Bioblend now gives you the most complete, verified range of natural tooth colors in twelve correlated polychromatic blends . . . offering the widest choice in selection for every age and complexion requirement in your denture practice.**

Another important plus—the new expanded Bioblend line of forty-two Upper Anteriors now provides a wide range of selection from graded sizes in your favorite Bioblend forms.

Ask your Trubyte Dealer to show you the beautiful new Blend Selector and the new Mould Guide for Trubyte Bioblend—two important new prosthetic aids which belong in every dental office.

A product of The Dentists' Supply Company of New York • York, Pennsylvania

